2013-2018
PEST MANAGEMENT PLAN

MEETING SOMERSET'S PEST MANAGEMENT CHALLENGE

Parthenium

Wild Dogs

Rabbits

Annual ragweed

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CONTENTS

1.0 Executive Summary

Somerset Region forms a large part of the Brisbane Valley catchment and boasts a beautiful natural environment surrounding Somerset and Wivenhoe Dams. The region contains a wide variety of bushland habitats, waterways and vast rural areas home to a diverse number of native fauna and flora species. The region also has many primary producers who contribute to Somerset Region's growth and local economy.

Declared pests are plants and animals that cause significant adverse economic, environmental and social impacts. They reduce industry productivity, threaten environmentally significant areas or species, choke waterways and degrade land.

Declared pests also impact on health, recreational use and social amenity.

Queensland's *Land Protection (Pest and Stock Route Management) Act 2002* places a responsibility on landholders to manage declared pests. The Act also places an obligation on local governments to develop a plan detailing strategies to manage declared pests in their local area. This document has been prepared to meet this obligation and details how challenges posed by declared pests will be met.

Somerset's draft 2012 –2016 Pest Management Plan contains four strategic objectives and fifty strategic actions to be achieved over four years.

The document identifies Environmentally Significant Areas and Aquatic Environments that will be closely monitored.

This draft plan is being developed in consultation with key stakeholders who share a passion to protect Somerset's natural environment and sustain primary production. The draft plan aims to improve the effectiveness of control activities, monitor and report on performance, prioritise pest management activities, improve coordination, improve stakeholder participation and increase public awareness about the need to manage declared pests.

Strategic Objective 1	Increase community awareness of declared pests, their identification impacts and control.
Strategic objective 2	Manage the introduction of new declared pests and minimise the spread of existing infestation.
Strategic objective 3	Sustain best pest management practice and maintain regional collaborations.
Strategic objective 4	Protect Environmentally Significant Areas and Aquatic Environments from declared pests.

2.0 BACKGROUND

2.1 Introduction

Somerset Regional Council was formed in March 2008, by the amalgamation of the former Esk and Kilcoy Shire Councils. The Somerset Regional Council area consists of:

- Approximately 22,000 residents
- 10,679 rateable properties
- 405 km of State roads
- 3,264 km of local roads
- 5,379 square kilometres of land
- 1,940 ha of land reserves

Figure 1 below shows the Somerset Regional Council area.

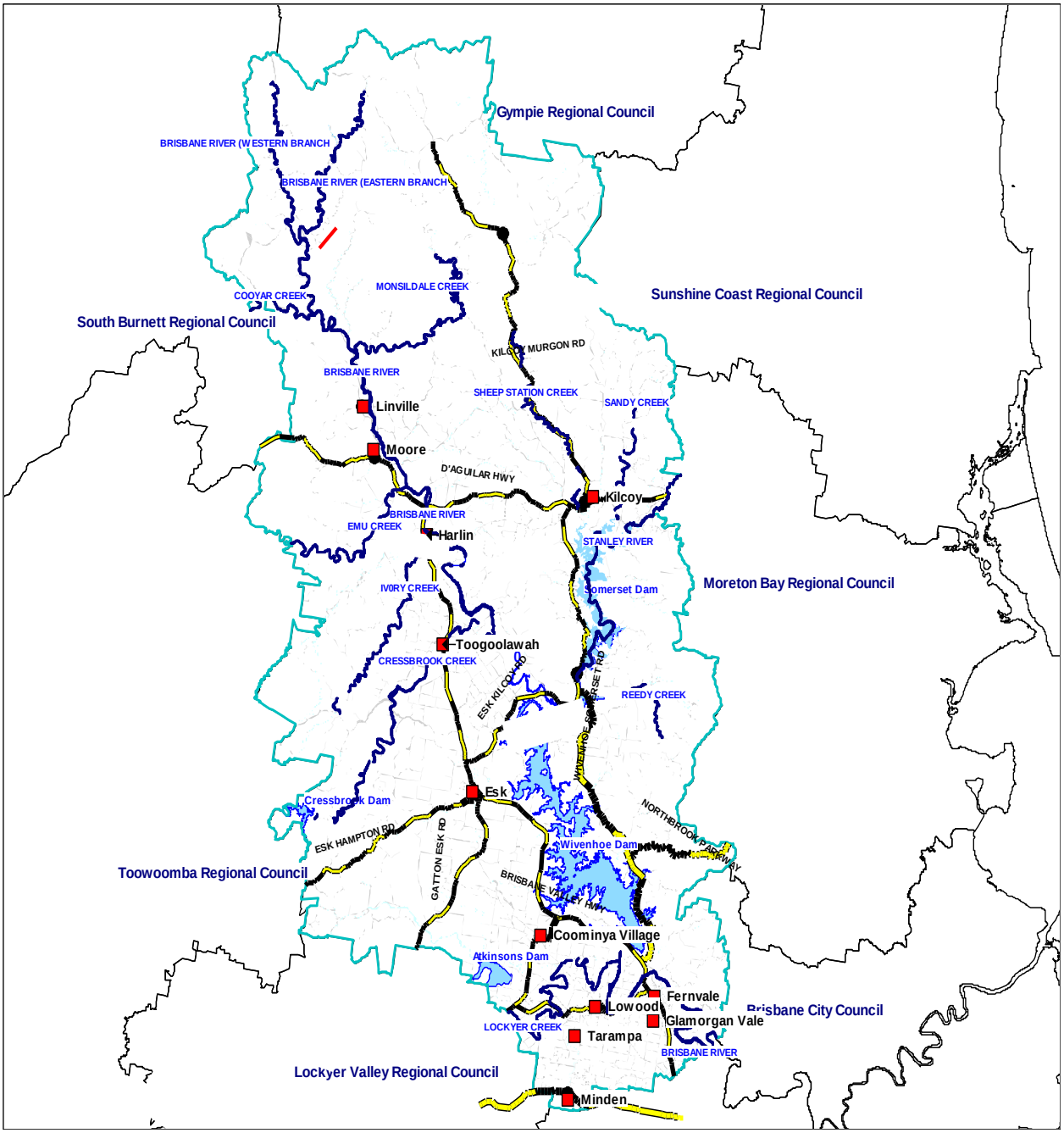
Pest Management is a very important land management issue in the Somerset Region with established populations of declared pest animals such as wild dogs, rabbits, European foxes along with infestations of declared plants such as Annual ragweed, Giant rats tail grass, Parthenium, Mother of millions and Fireweed.

The *Land Protection (Pest and Stock Route Management) Act 2002* [the Act] requires all Local Governments to implement a State-approved Local Government Area Pest Management Plan. The Act sets out the principles for pest management that must be incorporated into each plan, which are as follows:

- Integration
- Public Awareness
- Consultation and Partnership
- Planning
- Best Practice
- Improvement

This draft plan is being developed to meet the requirements of the Act and to reflect the current declared pest management challenges faced by Somerset.

Figure 1—Somerset Regional Council Area



2.2 Scope

The Act requires all local government areas to implement a State-approved Local Government Area Pest Management Plan for **declared pest plants and animals** in its area. The management of plants and animals that are not declared pests (as defined by the Act) are not included in this document.

2.3 Legislation

The Act provides the legislative framework for the development of Local Government Area Pest Management Plans. Section 25 of the Act states that the plan must include:

- A set of achievable objectives under the plan.
- Strategies, activities and responsibilities for achieving the objectives.

- Strategies to inform the local community about the content of the plan and achievement of its objectives.
- Mechanisms to monitor the implementation of the plan and evaluate its effectiveness.
- Other matters the local government considers appropriate for the management of declared pests in its area.
- The plan is to be consistent with the principles of pest management, State pest management strategies and guidelines for pest management.

The Act (Section 77) places responsibilities and obligations on all landholders to take reasonable steps to keep land under their control free of class 1 or class 2 pests, unless the owner holds a declared pest permit allowing the pests to be kept on the land. Local Governments and State Government agencies are required to control declared pests on land under their control. This land includes - the owner's land, unfenced land comprising part of a road or stock route that adjoins or is within the owner's land, other land that is fenced in with the owner's land, the bed, banks and water of a watercourse on the owner's land, the bed, banks and water to the centre-line of a watercourse forming a boundary, or part of a boundary of the owner's land.

Table 1 Pest Classes as Defined in Section 38 of the Act.

Category	**Description**
Class 1	A Class 1 pest is one that has the potential to become a very serious pest in Queensland in the future. We need to prevent the import, possession and sale of these species so that they cannot escape to become pests. All landholders are required by law to keep their land free of Class 1 pests without a permit. Class 1 pests are not generally established in Queensland and have the potential to cause adverse economic, environmental or social impacts.
Class 2	A Class 2 pest is one that has already spread over substantial areas of Queensland, but its impact is so serious that we need to try and control it and avoid further spread onto properties that are still free of the pest. By law, all landholders must try to keep their land free of Class 2 pests and it is an offence to keep or sell these pests without a permit. Established in Queensland and can cause significant adverse economic, environmental or social impacts (including in another State).
Class 3	A Class 3 pest is one that is commonly established in parts of Queensland but its control by landholders is not deemed to be warranted unless the plant is impacting, or has the potential to impact on a nearby 'environmentally significant area' (e.g. a National Park). It is an offence to sell, introduce or release a Class 3 pest. Established in Queensland and has or could have adverse economic, environmental or social impacts (including in another State).

Appendix C contains a copy of sections 25-35 of the Act which details the steps involved in developing a pest management plan. Appendix D also contains an example enforcement procedure.

2.4 Previous Pest Management Plans and other Regional Plans

The previous Esk and Kilcoy Shire Councils developed a four year local government area pest management plan in consultation with a Working Group comprising various stakeholders for the WESROC region, including Ipswich City Council, Boonah, Esk, Kilcoy, Gatton and Laidley Shire Councils.

The strategies, objectives and operational actions of the previous Regional Local Government Area Pest Management Plan along with other stakeholder's plans, policies and procedures have been taken into account when drafting the new pest management plan for Somerset Regional Council. Some of these plans, policies and procedures include:

- Seqwater – Local Operational Plan and Natural Asset Management Plan, PRW Bulk Water Pipeline – Easement Maintenance.
- Seqwater Draft Operational Biosecurity Plan & Natural Asset Management Plans for the Catchments of the Stanley River and Upper Brisbane River.
- Powerlink/ErgonEnergy/Energex/Country Energy – Queensland Energy Network Biosecurity Guidelines and QESI Code of Practice for Maintenance of Electricity Corridors in Queensland Parks and Forests.
- DEHP in collaboration with SEQ Catchments – SEQ Regional NRM Plan.
- Queensland Urban Utilities – QUU Policies and Procedures.
- Queensland Parks and Wild Life – Pest Management Strategies for each Protected Area
- Esk Shire Council NRM Plan.
- Department of Local Government and Planning - Brisbane Valley Rail Trail NRM Plan.
- Transport and Main Roads – Element 5 Environmental Management Plan.

2.5 Developing the Pest Management Plan

Principles of Pest Management
The following are a list of principles of pest management for land as detailed in section 9 of the Act. These principles will provide guidance for the development of this Pest Management Plan:

- **Integration** - Pest management is an integral part of managing natural resources and agricultural systems.
- **Public awareness** - Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to manage pests.
- **Commitment** - Effective pest management requires a long-term commitment to pest management by the community, industry groups and government entities.
- **Consultation and partnership** - Consultation and partnership arrangements between local communities, industry groups, State government agencies and local governments must be established to achieve a collaborative approach to pest management.
- **Planning** - Pest management planning must be consistent at local, regional, state and national levels to ensure resources target priorities for pest management identified at each level.
- **Prevention** - Preventative pest management is achieved by: preventing the spread of pests, and viable parts of pests, especially by human activity; and early detection and intervention to control pests.
- **Best Practice** - Pest management must be based on ecologically and socially responsible pest management practices that protect the environment and the productive capacity of natural resources.
- **Improvement** - Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices.

Plan Development Process
The steps below outline the development and consultation process that will be undertaken in the

formulation of the Pest Management Plan in keeping with Division 4 of the *Land Protection (Pest and Stock Route Management) Act 2002*.

Table 2: Plan Development Process

Step 1	Pest Management Committee formed to prepare a working Draft Pest Management Plan for refinement by the Working Group.
Step 2	Working Group Established that includes: Pest Management Committee and the Key Stakeholder Reference Group that includes: • Other State and Federal Government Agencies; and • Landholder and Environmental Groups.
Step 3	Key stakeholder input incorporated into Consultation Draft
Step 4	Draft Pest Management Plan put to Council for comment and approval to move to public consultation
Step 5	Draft Pest Management Plan advertised for public consultation (published in local newspapers calling for written submissions for a minimum of 28 days).
Step 6	Public submissions considered and Draft Pest Management Plan reviewed if necessary.
Step 7	Draft Pest management Plan put to Council for approval to submit to the State Government for Ministerial endorsement.
Step 8	Submit the Draft Pest Management Plan to the Minister for Primary Industries, Fisheries and Rural and Regional Queensland for consideration and Ministerial endorsement.
Step 9	Ministerial advice adopted and Plan put to Council for adoption (Plan made available for public inspection free of charge).

2.6 Pest Management Working Group

To develop this draft plan, Council has formed a Pest Management Working Group that consists of the Pest Management Committee and the Key Stakeholder Reference Group listed below. Each Committee and Key Stakeholder Reference Group member possesses relevant qualifications and/or experience to provide input into the development and implementation of the draft plan.

Table 3: Pest Management Committee Members

Cr Helen Brieschke	Councillor Somerset Regional Council
Cr Dan Hall	Councillor Somerset Regional Council
Cr Jim Madden	Councillor Somerset Regional Council
Cr Kirsten Moriarty	Councillor Somerset Regional Council
Shane Lampard	Supervising Pest Management Officer
Steven Brennan	Senior Environmental Health Officer
Helen Haapakoski	Biosecurity Officer

Table 4: Key Stakeholder Reference Group Members

Organisation/Group	Name	Representative
Primary Producer/Landholder Groups	Mid-Brisbane River Irrigators	
	Agforce	Esk-Kilcoy Agforce - Secretary John Westaway, John Drynan and Jack Lewis
State Government	Biosecurity Queensland	Helen Haapakoski
	Seqwater	Dan Garcia, Perry Ward and Jessica Ash
	Department of Transport and Main Roads	Michelle Walker
	Department of Environmental and Heritage Protection	Wyn Boon, Lesley Eagles, Bronwyn McAdam(QPWS)
	Department of Local Government and Planning	Peter Kleis (Brisbane Valley Rail Trail)
Environmental Groups	SEQ Catchments	Bruce Lord
	Healthy Waterways	Rachel Cadwallader
Utilities	Queensland Urban Utilities	Kirk Underwood
	Powerlink	Luke von Boehm

3.0 Strategic Directions

3.1 Impacts of Declared Pests

Weeds and pest animals are found in every local government area. Weeds and pest animals cost Queensland more than $710 million every year in lost production and control costs. They also cause degradation of natural resources, threaten biodiversity values and interfere with human health and recreational activities.

Pest Animal Impacts

Wild Dogs/Dingoes impacts:

- Cows and calves killed
- Cattle marked or maimed reducing sale price
- Dairy cows rendered worthless
- Predation of peri-urban livestock and pets

- Predation on native animals and competition for resources

Rabbit impacts:
- Production losses for livestock and small crops
- Hay bale quality loss from invasion of storage facilities
- Pastures made unsafe for stock
- Degraded pasture quality
- Small crop damage
- Environmental impact (non-functioning ecosystem resulting in soil erosion, water quality problems etc.)
- Direct competition with native animals for food and harbor
- Urban impact (undermine house foundations, destabilise fences and trees)

Feral Pig impacts:
- Degraded pasture quality resulting in a reduction in carrying capacity
- Small crop damage
- Disturbance to soil in creek banks and flood plains accelerating erosion and reducing water quality and increasing sediment loads
- Potential to carry exotic diseases such as foot and mouth

European Fox impacts:
- Predation on native animals and competition for resources
- Peri-urban and rural poultry predated
- Erosion of creek banks and gullies from den

Feral Cat impacts:
- Predation on native animals and competition for resources
- Peri-urban and rural poultry predated
- Potential to carry disease that can harm humans and native animals
- Fighting with domestic pets (vet bills)

Deer impacts:
- Reduced production from direct competition for pasture
- Reduced production for small crops and Lucerne
- Personal risk (extremely aggressive during breeding season)
- Social impact-traffic hazard for vehicle collision
- Potential to carry and spread endemic (i.e. cattle tick) and exotic parasites and disease (i.e. foot and mouth and rabies)
- Weed seed spread
- Peri-urban garden and fence destruction.

Pest plants impacts:
- Degraded pasture quality reducing grazing productivity
- Poison animals resulting in death or reduction in overall body weight
- Reduce a property's ability to maintain a healthy breeding herd
- Taint milk
- Smother poor pastures if left unchecked
- Some can create allergic reactions if touched or pollen is inhaled
- Compete with native plants for nutrients, water and space
- Some can become fire hazards
- Degrade native vegetation and habitat areas.
- Reduced aquatic habitat values and physically block waterways

- Increased evaporation of water stores

3.2 Somerset's Strategic Objectives

Somerset Regional Council has set the following four strategic pest management objectives to achieve during the life of this plan:

Strategic Objective 1: ***Increased community awareness and education of declared pests, their identification impacts and control.***

Strategic Objective 2: ***Manage the introduction of new declared pests and minimise the spread of existing infestations.***

Strategic Objective 3: ***Sustain best pest management practice and maintain regional collaborations.***

Strategic Objective 4: ***Protect environmentally significant areas and aquatic environments from declared pests.***

3.3 Desired Outcomes

The State Government has determined a strategic pest management framework for Queensland which consists of a number of desired outcomes, principles and issues. The table below details those desired outcomes, principles and issues and how they link with Somerset Regional Council's four strategic objectives.

Table 5: State Desired Outcomes and Links to Somerset Strategic Objectives

Desired Outcome	Issues	Somerset Strategic Objective
1. Awareness and Education (Principle - Stakeholders are aware, knowledgeable and have ownership of pest species management).	1. Awareness 2. Education and training 3. Availability of information	**Strategic Objective #1:** Increase community awareness of declared pests, their identification, Impacts and control.
2. Reliable Information (Principles – Improvement – Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices).	1. Data collection and assessment 2. Pest biology and pest impacts 3. Community attitudes and the adoption of information	**Strategic Objective #3:** Sustain best pest management practice and undertake regional collaboration

3. Strategic Directions (Principles - Planning - Pest management planning must be consistent at local, regional, state and national levels to ensure resources target priorities for pest management identified at each level. Integration - Pest management is an integral part of managing natural resources and agricultural systems, maintained and owned by the community).	1. Planning 2. Strategy management and coordination 3. Resources 4. Holistic management	**Strategic Objective #1:** Increase community awareness of declared pests, their identification, impacts and control. **Strategic Objective #2:** Manage the introduction of new declared pests and minimise the spread of existing infestations. **Strategic Objective #3:** Sustain best pest management practice and undertake regional collaboration **Strategic Objective #4:** Protect Environmentally significant Areas and Aquatic Environments from declared pests.
4. **Prevention Eradication and containment** (Principle – Prevention – Effective pest control is achieved by: 1. Preventing the spread of pests by human activity, and 2. Early detection and intervention to control pests.)	1. Prevention 2. Early detection and eradication 3. Reduction and containment	**Strategic Objective #2:** Manage the introduction of new declared pests and minimise the spread of existing infestations. **Strategic Objective #4:** Protect Environmentally significant Areas and Aquatic Environments from declared pests.
5. Effective and Integrated Systems (Principles - 1. Best Practice – Pest management must be based on socially and ecologically responsible pest management practices that enhance the environment and productivity capacity of natural resources. 2. Improvement – Research about pests and regular monitoring and evaluation of pest control activities is	1. Best Practice - Pest management must be based on ecologically and socially responsible practices that protect the environment and the productive capacity of natural resources. 2. Improvement - Research about pests, and regular monitoring and	**Strategic Objective #1:** Increase community awareness of declared pests, their identification, Impacts and control. **Strategic Objective #2:** Manage the introduction of new declared pests and minimise the spread of existing infestations. **Strategic Objective #3:** Sustain best pest management practice and undertake regional collaboration **Strategic Objective #4:**

necessary to improve pest management practices. 3. Commitment - Effective pest management requires a long term commitment by the community, industry and government entities).	evaluation of pest control activities, is necessary to improve pest management practices. 3. Commitment - Effective pest management requires a long-term commitment to pest management by the community, industry groups and government entities.	Protect Environmentally significant Areas and Aquatic Environments form declared pests.
6. Commitment and Partnerships (Principles – Commitment - Effective pest management requires a long term commitment to pest management by the community, industry groups and government entities. Consultation and Partnership – Consultation and partnership arrangements between local communities , industry, state and local governments must be established in order to achieve a collaborative approach to pest management).	1. Long-term commitment 2. Compliance and enforcement	**Strategic Objective #3:** Sustain best pest management practice and undertake regional collaboration

3.4 Somerset Regional Area Pest Management Plan Stakeholder abbreviations

Table 6: Stakeholder Abbreviations

All	All stakeholders	DEHP	Department of Environment and Heritage Protection
BCF	Boating, Canoeing and Fishing Clubs	NI	Nursery Industry
FPQ	Forest Plantation Queensland	TO	Traditional owners
BQ	Biosecurity Queensland	Seqwater	Seqwater
DTMR	Department of Transport and Main Roads	NLG	Neighbouring Local Government Councils

EDU	Education Institutions	PIJAC	Pet Industry Joint Advisory Council
FG	Farming/Primary Industry Groups(BV Irrigators, Agforce)	SEQC	SEQ Catchments
LC	Brisbane Valley-Landcare, West Moreton Landcare, Upper Brisbane Region Catchment Network, Atkinson-Buaraba Creek Landcare.	UT	Utilities, eg –Energex, Powerlink, Telstra, Origin
SRC	Somerset Regional Council	DLG	Department of Local Government
LGWG	LG PMP Working Group	GD	All State and Federal Government Departments
LH	Land holder/Managers Private and State lands	QUU	Queensland Urban Utilities
EI	Extractive Industry		

3.5 Somerset's Strategic Actions

Table 7 below contains 50 action items to be implemented during the life of the plan in order to achieve Somerset's pest management strategies.

Table 7: Strategic Actions

Strategic Objective 1		**Increased community awareness of declared pests, their identification, impacts and control**	
Strategic Action Number	**Action Item**	**By whom**	**Success Indicators**
1.1	Promote and organise declared pest awareness - raising/education activities such as stands at local shows, field days, newsletter and newspaper articles and school talks.	**SRC**, BQ, SEQC, **LC**	Number of activities conducted.
1.2	Provide community access to pest management information such as 'pest fact' information sheets, Council's pest management plan through the internet, Council Officers and Visitor Information Centre.	BQ, **SRC**, SEQC, Seqwater	Amount of information provided customers engagements.
1.3	Support bushland care programs by providing technical support and general advice.	BQ, **SRC**, SEQC, **LC**	Programs supported.

1.4	Keep key stakeholders informed about Pest Management information and activities.	BQ, **SRC**, SEQC, **LC**	Number of stakeholder engagements.
1.5	Support the nursery industry, (including local markets) identifying potentially invasive species to be removed from sale stock.	BQ, **SRC, LC**	Invasive species identified and regulated by nursery industry
1.6	Target awareness campaigns at landholders in areas at risk of invasion so they can identify the new pest.	**SRC**, BQ, DEHP, Seqwater, **LC,** FPQ, SEQC, EDU	Number of awareness campaigns.
1.7	Develop mechanisms for community feedback to determine change in awareness, uptake of information and local pest issues/attitudes (eg. Online survey, feedback at education events)	**SRC,**BQ, SEQC, Seqwater, LC	Mechanisms are developed. Amount of feedback received and evaluated.

Strategic Objective 2		**Manage the introduction of new declared pests and minimise the spread of existing infestations.**	
Strategic Action Number	**Action Item**	**By whom**	**Success Indicators**
2.1	Control declared class 1 and 2 pests on land within the Somerset Council area.	**LH**	Number of allotments where declared class 1 and 2 pests have been controlled.
2.2	Develop property specific pest management plans on those properties with large or difficult to treat infestations of priority pests.	**LH**, **SRC**	Number of: • Property Pest Management Plans developed • Plans showing continuous treatment and successful control and containment • Properties requiring Enter and Clear action
2.3	Control declared pests on reserves that are occupied by landholders under permits or leases and trusteeships.	**LH**	% of infestations controlled.

2.4	Undertake declared pest plant control programs including declared class 3 pests in environmentally significant areas and on land adjacent to environmentally significant areas.	**LH**	Number of control programs undertaken.
2.5	Limit pest plant spread by encouraging good hygiene and prevention practices including the use of pest hygiene declarations for stock fodder and equipment movement as per S45 of the Act.	**All**	Number of Plant operators and landowners who implement practices.
2.6	Develop and undertake Declared Pest Survey Program. (Pest Surveys to be conducted in a series of rolling programs to ensure a significant area of land is inspected across our Region).	**SRC, BQ**	Declared Pest Survey Program advertised and undertaken. Total number of infestations and new infestations identified.
2.7	Develop and implement an enforcement procedure having regard to high priority pest and areas for control.	**SRC**	Number of pest control notices issued Number of properties that: • Comply with the notice • Are entered and cleared by Council
2.8	Develop a process to address pest management issues for reconfiguration of lot approvals. A process may include - pest surveys, standard conditions, property pest management plans.	**SRC**	Process developed and implemented.
2.9	Develop and undertake proactive and reactive pest animal control programs in accordance with government guidelines.	LH, **SRC**, **BQ**	Number of control programs implemented
2.10	Establish control and priority levels for the management of declared pests. Establish containment lines for agreed priority pest plants where appropriate.	**SRC**, LGWG	Levels of control and priorities established. Containment lines are established and maintained for agreed priority pests where appropriate.
2.11	Identify and eradicate incursions of declared class 1 and new incursions of class 2 pests and implement effective management programs to include a rapid response capability in conjunction with Biosecurity Queensland.	**SCR, BQ**	Location of Class 1 pests and incursions of new class 2 pests identified and effectively managed in consultation with Biosecurity Queensland.
2.12	Prevent the planting of declared pest plants in public landscaping projects and new developments.	**SRC**, SEQC, LC	No declared plants knowingly planted.

2.13	Prevent the sale of declared pests plants by local nurseries and at local markets and include them in inspection programs.	NI, **SRC**, **BQ**	Nursery industry endorsement of a list of priority prohibited invasive plants. Reduction of invasive weeds sold at nurseries. Number of nurseries and markets inspected.
2.14	Host and attend regional forums and training to identify and manage potential threat species such as Mexican feather grass, Chilean Needles Grass, Parthenium, Wild Dogs, GRT.	**BQ, SRC,** SEQC, LC, FG	Number of regional forums attended. Pest management staff trained to identify emerging pests.
2.15	Develop incentive programs to assist landholders with the control priority declared pests.	**SRC**, LC, **BQ,** SEQC	Number of incentive programs developed. Number of landholders who use programs.
2.16	Treat declared pest infestation on roads and reserves in line with priority pest actions.	**SRC**, DTMR, DLGP	Number of infestations treated.
2.17	Survey, map and maintain a database showing the location and density of all class 1 and priority class 2 pest plant infestations and the location of all pest animal control activities. Develop mechanisms for sharing information between stakeholders.	**SRC**, DEHP, **BQ**, Seqwater, FPQ, DLGP	Existing and new infestations routinely mapped. Information sharing mechanisms are developed. Information shared between stakeholders in line with agreed guidlines.
2.18	Develop a plan to strategically locate wash down facilities in the region to assist in weed hygiene practices.	**SRC**, FG, DTMR, BQ.	Plan developed
2.19	Provide funding sources for the installation of wash down facilities in the region having regard to the plan developed in 2.18 above.	**GD**, SRC	Number of projects funded and implemented.

Strategic Objective 3	**Sustain best pest management practice and maintain regional Collaboration.**

Strategic Action Number	Action Item	By Whom	Success Indicators
3.1	Integrated best practice management.	**All**	Pest management programs take into consideration timing and costs; control methods; prevention; non-target damage; animal welfare; workplace health and safety; monitoring; new research and operational procedures.
3.2	Ensure accredited training of all on-ground pest management staff.	SRC, BQ, DEHP, Seqwater, SEQC, UT, DLGP, FBQ	Pest management staff and contractors possess nationally accredited qualifications.
3.3	Commit to resourcing local pest management actions on a priority basis.	SRC, BQ, DEHP, Seqwater, SEQC, FEQ, LH, UT	Adequate resources provided to undertake pest management.
3.4	Maintain and upgrade specialty vehicles and field equipment.	SRC, DEHP, Seqwater, BQ, hirers, of equipment, UT	Successful retention, maintenance and expansion of current pest management assets.
3.5	Submit local government precepts (annual payments) to Biosecurity Queensland for pest management services.	**SRC**, DEHP, FBQ	Precepts duly submitted.
3.6	Collect and distribute local pest data to Queensland Biosecurity Annual Pest Assessment (State-Wide mapping of all declared species).	SRC, **BQ**, DEHP, Seqwater	Data provided in standard format.
3.7	Host and/or participate in industry events such as: • SEQPAF meetings • QLD Weeds Symposium • LG training workshops • National Weeds Conferences • Vertebrate Pests Conferences	BQ, SRC, SEQC, UT	Attendance at Industry events.
3.8	Review internal practices as needed to comply with recommendations from industry events.	**All**	Information reviewed and practices amended where necessary.

3.9	Liaise with surrounding local government authorities to integrate declared pest management activities.	**SRC**, BQ, NLG	Pest management activities integrated where necessary, e.g. wild dog control.
3.10	Require contractors to adopt best hygiene practice and incorporate best practice hygiene into contract specifications.	**All**	Number of contracts requiring best practice weed hygiene. Number of contractors adopting best practice weed hygiene practices.
3.11	Keep up to date with research on the management of pests.	**All**	Stakeholders informed.
3.12	Collaborate with regional stakeholders when planning and reviewing operational plans, procedures and policies.	**All**	Plans, policies, procedures are regionally consistent and integrate collaboratively.
3.13	Undertake research on population, behaviour, movement and local impacts of pest animals in the regional (e.g. Wild dogs, pigs).	**BQ,** SRC, Seqwater, SEQC, EDU	Research projects funded and undertaken.

Strategic Objective 4		**Protect Environmentally Significant Areas and Aquatic Environments from declared pests.**	
Strategic Action Number	**Action Item**	**By whom**	**Success Indicators**
4.1	Investigate the mapping of additional areas of local environmental significance utilising emerging methodology (e.g. Biodiversity Planning by DLGP 2012)	**SRC,** SEQC, DEHP, DLGP	Map of local environmentally significant areas utilising reliable, repeatable and locally relevant methodology.
4.2	Based on maps of environmentally significant areas, define declared pest distribution in environmentally significant areas and the level of control required.	**DEHP**, BQ, SEQC, SRC	Declared pest distribution defined and management programs designed.
4.3	Involve local communities in site-based management of declared pests in environmentally significant areas where appropriate.	SEQC, BQ, LC, DEHP, SRC, EDU, FG.	Community groups involved in declared pest management in environmentally significant areas.
4.4	Control Class 3 declared pest plants on properties adjacent to environmentally significant areas free of Class 3 plants, in line with agreed priorities.	LH	Advice to landholders on effective control strategies. Notices issued as appropriate.

4.5	Investigate expansion of pest management subsidies to properties adjacent environmentally significant areas.	SRC, LH	Take up of pest subsidies by property owners adjacent to environmentally significant areas.
4.6	Consider declaring specified pest plants in Environmentally Significant Areas, through use of Local Laws where warranted.	SRC	Specified pest plants are declared under Somerset Regional Council local laws as required.
4.7	Include environmentally significant areas in annual declared pest surveys in line with agreed priorities.	DEHP, BQ, SRC, Seqwater	Environmentally significant areas surveyed.
4.8	Develop Natural Area Management Plans for environmentally significant and aquatic environments.	DEHP, Seqwater, SRC, DLGP, FPQ, DTMR	Natural Area Management Plans developed.
4.9	Investigate community management models for publicly owned environmentally significant areas where there is limited active public management.	DEHP, SRC	Basic management processes in place for all publicly owned environmentally significant areas.
4.10	Investigate project/funding opportunities with relevant stakeholders for a collaborative approach to the control of aquatic weeds in major catchments.	BQ, Seqwater, DEHP, SEQC, SRC, FG, LH.	Project opportunities indentified. Projects funded.
4.11	Provide funding opportunities to control declared pests in environmentally significant and aquatic environments.	**GD**	Funding opportunities provided.

4.0 Plan Implementation

4.1 Declared Pests in the Somerset Region

Somerset Regional Council has identified which declared pest species are contained within the region. There are 26 declared pest plants including 3 Weeds of National Significance and 8 declared pest animals. A priority rating has been given to every known declared pest plant and animal in the Somerset Region having regard to:

- Their ability to multiply and spread
- The capacity for the community to control the pest
- The economic, environmental and social impacts
- The class of the pest and if it is a Weed of National Significance.

Table 8 below lists the declared pest plants and animals known to be found in the Somerset Region in order of priority rating, with 1 being the highest priority.

Table 8: Declare pest plants know to be found in the Somerset Regional Council area.

Common Name	Class	Distribution	Risk of Spread	Ability to control and reduce	Operational Objective	Priority
Mexican feather grass	1	Currently not present (previous infestation eradicated	High	Med	To eradicate if present	1
Honey locust	1	Isolated	High	High	To eradicate	1
Parthenium*	2	Scattered	High	Med	To contain and reduce	2
Fireweed	2	Scattered	High	Med	To contain and reduce	3
Hymenachne*	2	Brisbane River	High	Med	To eradicate	4
Rat's tail grasses	2	Abundant and Widespread	High	Med	To contain and reduce	5
African boxthorn	2	Scattered	High	Med	To contain and reduce	6
Annual ragweed	2	Abundant and Widespread	High	Med	To contain and reduce	7
Mother of millions (and hybrids)	2	Abundant and Widespread	High	Med	To contain and reduce	8
Water hyacinth	2	Abundant and Widespread	High	Med	To contain and reduce	9
Water lettuce	2	Scattered	High	Med	To contain and reduce	10
Salvinia*	2	Isolated	High	Med	To contain and reduce	11
Groundsel bush	2	Scattered	High	Med	To contain and reduce	12
Prickly pear	2	Isolated	High	Med	To contain and reduce	13
African tulip tree	3	Scattered	High	Med	Cannot be sold, contain and reduce where required	14
Singapore daisy	3	Scattered	High	Med	Cannot be sold, contain and reduce where required	15
Yellow bells	3	Scattered	High	Med	Cannot be sold, contain and reduce where	16

					required	
Balloon vine	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	17
African fountain grass	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	18
Chinese celtis	3	Widespread	High	Low	Cannot be sold, contain and reduce where required	19
Broad leaf pepper tree	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	20
Privet species	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	21
Dutchman's pipe	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	22
Madeira vine	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	23
Cat's claw creeper	3	Abundant and Widespread	High	Low	Cannot be sold, contain and reduce where required	24
Camphor laurel	3	Abundant and Widespread	High	Low	Cannot be sold, contain and reduce where required	25
Asparagus fern species	3	Scattered	High	Low	Cannot be sold, contain and reduce where required	26
Lantana species*	3	Abundant and Widespread	High	Low	Cannot be sold, contain and reduce where required	27

**Indicates that this is a Weed of National Significance (WoNS), appendix A has a full listing of WONS.*

Table 9: Declared Pest Animals known to be found in the Somerset Regional Council area.

Common Name	Class	Distribution	Ability to control and reduce	Economic Impact	Environmental Impacts	Operational Objective	Priority
Dingo / Dog other than domestic dog	2	Widespread	Medium	High	High	To control and reduce	1
European rabbit	2	Widespread	Medium	High	High	To control and reduce	2
Feral Pig	2	Scattered	Medium	Med	High	To control and reduce	3
European fox	2	Widespread	Medium	Low	High	To control and reduce	4
Cat, other than domestic cat	2	Scattered	Medium	Low	High	To control and reduce	5
Rusa Deer	2	Scattered	Medium	Medium	High	To control and reduce	6
Fallow Deer	3	Scattered to isolated	Medium	Medium	High	Medium	7
Red Deer	3	Widespread	Low	Medium	High	Low	8

4.2 Determining Priority Areas for Pest Management

With limited resources the Council and community will need to focus on priority weeds in priority areas of the catchment. Priority areas will be assessed on the following attributes:

1) Declared weed priority – as identified in local, State and National priority lists.
2) Property position within the catchment area (amount of area which may become infested).
3) Density and total area of infestation.
5) Capacity of land owner to contain.
6) Ease of access.
7) Risk to environmentally significant areas.

The Council has developed a rating system designed to assist in deciding what areas and infestations require priority weed control action. The prioritisation system for identifying where pest management actions should be focused is outlined in Table 10 below. Once weed containment lines are established, these will form part of the priority assessment process.

Table 10: Rating system designed to determine high priority weed management areas and areas to focus Councils resources.

Capacity to Manage Pest Infestation			
Relevant Criteria	**Weighting**	**Location**	**Priority Rating**
Position within the catchment	/50	Upper	50

area		Middle Low	30 15
Distance from transport corridors	/15	0km 1-5km 5-10km <10km	15 7 5 2
Density of infestation	/20	High Medium Low Scattered	20 10 5 2
Density on neighbouring properties	/20	High Medium Low Scattered	4 8 12 20
Invasiveness of priority species	/25	High Medium Low	25 15 10
Accessibility	/10	Good Poor Very Poor	10 5 2
Total area covered by infestation	/30	Isolated and small <5ha 5-25ha 25-100ha 100-500ha >1000ha	30 20 10 4 2
Overall property score			/170

*Note :

- Very High Priority = 140 - 170
- High Priority = 105 - 139
- Medium Priority = 66 - 104
- Low Priority = less than 65

4.3 Regional Priority Pest Actions – Weeds

The following section lists priority pest actions, assigns stakeholder responsibility and provides further information on the top 13 priority weeds in the region. Declared pest plants which have a lower priority rating will be controlled where possible with landholder assistance and in accordance with the Act.

Honey locust, Gleditsia triacanthos all varieties (Declared Class 1)

Operational Objective: To eradicate

Background Information

Honey locust is an aggressive pest that can out-compete and replace native vegetation and pastures. Also the long, strong spikes on the plant can injure stock and native wildlife, while the dense thickets formed by the plant can prevent their access to water. The spikes on the pest can also inflict painful injuries to humans and damage or restrict the movement of vehicles near infestations.

Local Distribution

A small number of Honey locust are located sparsely throughout the region. Honey locust is primarily found in or alongside creek and river systems across our region.

Spread Mechanism
Honey locust produces seed pods that can grow to 20-30cm long. The seeds have hard, impenetrable coats and can remain viable for 20 years or more. The seed can be spread by water movement and birds feeding on the seeds.

Control Information
Honey locust is controlled in accordance with the guidelines in the Pest Facts brochure. This includes herbicidal treatment which are applied using the basal barking technique. Mechanical control, such as chainsaw or a bulldozer for larger infestations are more successful when combined with the use of herbicidal treatment of re-growth. Regardless of which method is used, thorns take a long time to break down and thus to avoid safety issues, it is recommended that dead trees are removed from the site.

Table 11: Priority Pest Actions – Honey locust

Action	Who	When	Success Indicators
Treat/control infestations on land within the region.	LH	Ongoing	Number of treatments
Notify Council of any infestation.	All	Ongoing	Number of notifications
Have in place rapid response procedures for all notifications.	BQ, SRC	Ongoing	% of notifications responded to.
Promote identification and control of Honey locust to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC and BQ SEQC and Seqwater	Ongoing	Number of promotional/educational activities
Regularly inspect roads and reserves and Council leased land and treat any Honey locust plants that are found with a high priority for control.	SRC	Ongoing	Number of inspections and treatments
Conduct surveys to record locations of all known and new infestations using the GPS mapping system.	SRC, DEHP, DEEDI, Seqwater	Each year	Number of existing and new infestations mapped.

Develop an enforcement program covering sites of present or past infestations of Honey locust. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Program developed.
Check for infestations of Honey locust whilst conducting inspections during development applications for subdivisions.	SRC		Number of infestations detected.

Parthenium weed, *Parthenium hysterophorus* (declared Class 2)

Operational Objective: To eradicate – outside of main containment line area

Background Information
Parthenium weed is a vigorous species that in the right conditions can grow and produce flowers at any time of the year. However, the weed normally germinates in spring and early summer, then produces flowers and seeds before dying in late autumn. The weed readily inhabits disturbed, bare areas including along roadsides and heavily stocked areas around stockyards and watering points. Parthenium weed has a large economic impact on the beef industry, both through reduced beef production from reduced pasture production potential and control costs. The pest is a health issue. Contact with the plant can cause serious allergic reactions such as dermatitis and breathing difficulties.

Local Distribution
Known infestations of Parthenium are located in the Woolmar area and isolated patches in the Gregors Creek, Linville and Mt Kilcoy areas.

Spread Mechanism
As with most weeds, prevention is much cheaper and easier than the cure. Parthenium seeds can spread via water, vehicles, stock, feral and native animals and in feed and seed. Vehicles and implements passing through Parthenium weed infested areas should be washed down with water. Extreme caution should be taken when moving cattle from infested to clean areas. Avoid movement during wet periods as cattle readily transport seed in muddy soil. On arrival cattle should be held in yards or small paddocks for a minimum of seven days until all seed has dropped from their coats and any seed ingested has had a chance to pass.

Control Information
Parthenium weed is controlled in accordance with the guidelines in the Pest Facts brochure and the WONS national strategy. In the Somerset Region this primarily involves herbicide treatment, using the herbicides recommended in the previously mentioned guidelines. Herbicide treatment needs to be conducted before the plant can set seed, and involves the application of a knockdown herbicide as well as a residual herbicide. It is important for treated areas to be regularly inspected to ensure further seed production is not occurring. Repeated spraying may be required, even within one year. Ensuring pastures are adequately managed and maintained

in a good condition, Biological control using one of nine insect species or two rust pathogens that have been introduced are other methods available to control Parthenium. However, Parthenium can be easily spread via water, vehicles, machinery, stock, feral and native animals and in feed and seed, so taking action to prevent these mechanisms of transport is another important control option.

Table 12: Priority Pest Action - Parthenium

Action	Who	When	Success Indicators
Treat/control infestations on land within the Region.	LH	Ongoing	% of infestations treated.
Notify Council of any infestation within the region.	All	Ongoing	Number of notifications.
Have in place rapid response procedures for all notifications.	BQ, SRC	Ongoing	% of notifications responded to.
Define containment lines for Parthenium in the region and give priority to control and treatment within these areas.	SRC, BQ	Each year and ongoing	Containment lines defined and maintained Number of treatments.
Promote identification and control of Parthenium to community and within Council by distribution of 'pest facts' and promotional and educational activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Regularly inspect roads, reserves and Council leased land and treat any Parthenium weed plants that are found with a high priority for control.	SRC	Ongoing	Number of inspections and treatments.
Conduct surveys and record locations of all known and new infestations using the GPS mapping system.	SRC, BQ, DEHP, Seqwater	As located	Number of existing and new infestations mapped.
Develop an enforcement program covering sites of present and past infestations and areas around containment lines. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Program developed.
Check for infestations of Parthenium whilst conducting inspections during development applications for subdivisions.	SRC	As needed	Infestations detected.

Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	Ongoing	Procedures implemented.
Work with stakeholders to 'scope out' and seek funding for a Parthenium control program.	SRC, LH, BQ, SEQC, Seqwater, UT(Powerlink), UQ	Ongoing	Project developed. Success of the project.

Fireweed, *Senecio Madagascariensis* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Fireweed is an aggressive invader of poor pastures and competes strongly with pasture species. Fireweed seed is spread by wind distribution. The plant is toxic to livestock, particularly cattle and horses. Fireweed can cause illness and death as well as slow growth and poor conditioning.

Local Distribution
Fireweed can be located across the southern end of our region around the Fernvale, Glamorgan Vale, Marburg and Minden areas and isolated plants near Kilcoy and Jimna.

Spread Mechanism
Fireweed seeds are light and have a pappus that enables them to be carried by the wind. The seeds also have rows of short hairs that can loosely cling to animals affording Fireweed the ability to be spread short distances by stock. However, it is spread greater distances in pasture seed, hay, turf, mulch and with stock transport. Fireweed seed can also be spread as a contaminant in transported materials such as hydro-mulch and grass seed.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure, and primarily focus on herbicidal treatment. It is recommended that small infestations be hand removed and placed in a plastic bag to contain and stop the spread of seed.

Table 13: Priority Pest Action – Fireweed

Action	Who	When	Success Indicators
Treat infestation on land in the region as a priority. Isolated plants to be hand removed, bagged appropriately and disposed of.	LH	Ongoing	Number of infestations treated.
Notify Council of any infestations.	All	Ongoing	Number of notifications.
Define containment lines for Fireweed in the region and give priority to control and treatment within these areas.	SRC, BQ, LH	Each year and ongoing	Containment lines defined and maintained Number of treatments.

Have in place a rapid response procedure for all new infestations outside the containment lines.	SRC	Ongoing	% of infestations responded to.
Promote identification and control of Fireweed to community and within Council by distribution of 'pest facts' and promotional and educational activities.	SRC, SEQC and BQ	On going	Number of promotional/ educational activities.
Regularly inspect roads and reserves and Council leased land and treat any Fireweed plants that are found with a high priority.	SRC		Inspections conducted/ treatments conducted.
Conduct surveys and record locations of all known and new infestations using the GPS mapping system.	SRC	Each year	Number of existing and new infestations mapped.
Develop an enforcement program covering sites of present and past infestations and areas around containment lines. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development of program.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas.	All	On going	Procedures implemented.
Check for infestations of Fireweed whilst conducting inspections during development applications for subdivisions.	SRC	Ongoing	Infestations detected.
Regularly inspect all known Fireweed sites on roads and reserves and around containment lines to ensure the continued control of all new plants.	SRC	Monthly	Sites inspected.

Hymenachne, *Hymenachne amplexicaulis* (declared class 2)

Operational objective: To eradicate

Background information

Hymenachne is a robust, rhizomatous, perennial grass that can grow to a height of 2.5m. Hymenachne invades waterways, including drains and dams by being carried on flood water. Hymenachne has the ability to reproduce vegetatively from very small pieces. Hymenachne can completely choke waterway areas causing flooding, displacing indigenous vegetation and reducing oxygen levels in water.

Local Distribution
Infestations of Hymenachne can be located in the Brisbane River and tributaries in the Mt Beppo, Harlin and Toogoolawah areas.

Spread Mechanism
Hymenachne produces roots along the stem at node intervals, allowing Hymenachne to be spread by flood water and deposited in dams, lagoons, wetlands, rivers and creeks. Monitoring a short time after flood events should allow identification of new incursions. Treatment of new infestations should then be carried out to prevent establishment.

Control Information
Hymenachne is controlled in accordance with the guidelines in the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicides recommended in the previously mentioned guidelines. Herbicide treatment needs to be conducted before the plant can set seed. No herbicides are currently registered for the control of Hymenachne but there are four off-label minor use permits in existence. These are listed on the NRM and W Fact sheet

Table 14: Priority Pest Actions – Hymenachne

Action	Who	When	Success Indicators
Treat/control infestations within the Region.	LH	Ongoing	% of infestations treated
Notify Council of any infestations.	All, BCF, Seqwater	Ongoing	Number of notifications.
Have in place a rapid response procedure for all new infestations.	SRC, Seqwater	Ongoing	% of infestations responded to.
Promote identification and control of Hymenachne to community and within Council by distribution of 'pest facts' and promotional and educational activities.	SRC, SEQC Seqwater and BQ.	On going	Number of promotional / educational activities.
Conduct surveys and record locations of all known and new infestations using the GPS mapping system.	SRC, Seqwater	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	On going	Procedures implemented.
Develop an enforcement program covering sites of present or past infestations of	SRC	Ongoing	Development of program.

Hymenachne. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.			
Check for infestations of Hymenachne whilst conducting inspections during development applications for sub-divisions.	SRC	Ongoing	Number of infestations identified.

Giant rats tail grass (GRT), *Sporobolus sp* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Giant rats tail grass and other weedy Sporobolus grasses are aggressive grasses that can reduce pasture productivity, out-compete desirable pasture grasses, and cause significant degradation of natural areas. Five species of introduced Sporobolus grasses are declared in Queensland. These are giant rats tail (GRT) grass (S.pyradmidalis and S.natalensis), American rats tail grass (S.jacqemontii), giant Parramatta grass (S. africanus). These species were originally introduced as contaminants in pasture seed.

Local Distribution
Infestations of GRT Grass can be located throughout the region.

Spread Mechanism
As with most weeds, prevention is much cheaper and easier than the cure. Giant rats tail grass seeds can spread via water, vehicles, stock, feral and native animals and in feed and seed. Vehicles and implements passing through Giant rats tail grass infested areas should be washed down with water upon exiting area. Extreme caution should be taken when moving cattle from infested to clean areas. Avoid movement during wet periods as cattle readily transport seed in muddy soil and on their coats. On arrival cattle should be held in yards or small paddocks for a minimum of seven days until all seed has dropped from their coats and any seed ingested has had a chance to pass.

Control Information
Giant rats tail grass is controlled in accordance with the guidelines in the Pest Facts brochure and Weedy Sporobolus Best Practice Manual. In the Somerset Region this primarily involves herbicide treatment, using the herbicides recommended in the previously mentioned guidelines. Herbicide treatment needs to be conducted before the plant can set seed and involves the application of a knockdown herbicide as well as a residual herbicide Flupropanate (be aware of the withholding period). GRT has the ability to produce seed heads every ten days, therefore it is recommended to inspect all known infestations fortnightly. Where small infestations are located remove the seed heads before spraying and place them in a plastic bag, or alternatively remove entire plant and place in the bag

Table 15: Priority Pest Actions – Giant rats tail grass

Action	Who	When	Success Indicators
Containment and reduction strategies implemented on land within the	LH	Ongoing	Number of property pest management plans

region. Property pest management plans for large infestations and treatment for small infestations.			implemented/number of treatments conducted.
Contain large infestations within buffer zones and limit traffic through infested areas.	LH	Ongoing	Number of infestations contained.
Define containment lines for GRT in the region and give priority to control and treatment within these areas.	SRC	Each year and ongoing	Containment lines defined and maintained number of treatments
Promote identification and control of GRT to community and within Council by distribution of 'pest facts' and promotional and educational activities.	SRC, SEQC and BQ.	Ongoing	Number of promotional / educational activities.
Conduct surveys and record locations of all known and new infestations using the GPS mapping system.	SRC	As Located	Number of existing and new infestations mapped.
Implement weed hygiene procedures in known infestation areas	All	Ongoing	Procedures implemented.
Develop an enforcement program covering sites of present and past infestations and areas around containment lines. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development of program.
Check for infestations of GRT whilst conducting inspections during development applications for sub-divisions.	SRC	Ongoing	Number of infestations identified

African Box Thorn, *Lycium ferocissimum* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
African Box Thorn is an aggressive invader of pastures and reserves, and along roadsides it can form impenetrable thickets. The plant reduces the utilisation of pasture land, hinders stock movement and provides shelter for rabbits. The plant grows better in lighter soils, particularly along dry creek beds, but can grow in all soil types. Seeds of the plant may germinate at any time of the year, while the adult plant generally flowers in summer.

Local Distribution
African Box Thorn can be located sparsely throughout the southern parts of the region.

Spread Mechanism
Birds and animals will readily spread African Box Thorn by eating the berries and excreting viable seed.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure and primarily focus on herbicidal treatment. Four techniques of herbicide application are used. Foliar spray, basal bark treatment, cut stump treatment and root application may be used. Alternatively large infestations of African Box Thorn may be cleared, however it is important to remove all seeds and roots or re-growth will occur.

Table 16: Priority Pest Actions - African Box Thorn

Action	Who	When	Success Indicators
Treat infestations on land within the region as a priority.	LH	Ongoing	Number of treatments.
Notify Council of any infestation within the region.	All	Ongoing	Number of notifications.
Define containment lines for African Box Thorn in the region and give priority to control and treatment within these areas.	SRC, BQ	Each year and ongoing	Containment lines defined and maintained Number of treatments.
Promote identification and control of African Box Thorn to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Regularly inspect roads and reserves and Council leased land and treat any African Box Thorn that are found with a high priority.	SRC	Ongoing	Number of inspections / treatments
Conduct surveys to locate and record all known and new infestations using the GPS mapping system.	SRC	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed
Develop an enforcement program covering sites of present and past infestations and areas around containment lines. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Program developed.
Check for infestations of African Box Thorn	SRC	Ongoing	Number of

whilst conducting inspections during development applications for subdivisions.			infestations detected.

Annual ragweed, *Ambrosia artemisifolia* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Annual ragweed, also called Ambrosia, Horseweed and Asthma plant can invade weak and overgrazed pastures, reducing productivity. The pollen of this plant can cause health problems such as hay fever and can aggravate asthma. Annual ragweed starts growing each year around the middle of September and finishes its life cycle mid February to early March when it seeds and dies.

Local Distribution
Annual ragweed is widespread across Somerset Region

Spread Mechanism
As with most weeds, prevention is much cheaper and easier than the cure. Annual ragweed seeds can spread via water, vehicles, stock, feral and native animals and in feed and seed. Vehicles and implements passing through Annual ragweed infested areas should be washed down with water upon exiting area. Extreme caution should be taken when moving cattle from infested to clean areas. Avoid movement during wet periods as cattle readily transport seed in muddy soil and on their fur. On arrival cattle should be held in yards or small paddocks for a minimum of seven days until all seed has dropped from their coats and any seed ingested has had a chance to pass.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines. Herbicide treatment needs to be conducted before the plant can set seed. In the Somerset Region this needs to be achieved by February to ensure a reduction in the seed bank. The best approach is to combine different methods. Control may include chemical, mechanical, opportunistic burning and biological control methods combined with land management changes.

Table 17: Priority Pest Actions - Annual ragweed

Action	Who	When	Success Indicators
Treat infestations on land within the region as a priority.	LH	Ongoing	Number of treatments.
Notify Council of any infestation within the region.	All	Ongoing	Number of notifications.
Promote identification and control of Annual ragweed to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ.	Ongoing	Number of promotional / educational activities.
Regularly inspect roads and reserves and Council leased land and treat any Annual ragweed plants that are found with a high	SRC	Ongoing	Number of inspections / treatments.

priority for control.			
Conduct surveys to locate and record all known and new infestations using the GPS mapping system.	SRC	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	On going	Procedures implemented.
Develop an enforcement program covering sites of present or past infestations of Honey locust. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Annual ragweed whilst conducting inspections during development applications for sub divisions.	SRC	Ongoing	Number of infestations detected.

Mother of millions, *Bryophyllum species* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Mother of millions are erect, smooth, fleshy succulent plants growing to one meter or more in height, all species form tall flower spikes in winter with clusters of bell shaped flowers. Mother of millions as the name suggests means that one plant can produce a new infestation from masses of embryoids (plantlets) that are formed on the leaf edges as well as from prolific seeding each year. This makes these plants hard to eradicate. Mother of millions is highly toxic to stock and because of its succulent features is well adapted to dry areas.

Local Distribution
Somerset has scattered infestations across the region. The largest infestations can be found throughout the southern districts of Coominya, Lowood, Tarampa and Glamorgan Vale.

Spread Mechanism
As with most weeds, prevention is much cheaper and easier than the cure. Mother of millions can spread via flood water and vehicles. Vehicles and implements passing through Mother of millions infested areas should be washed down with water upon exiting area. Slashing infested areas will only increase the number of plants already there and spread the infestation to other areas.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the

herbicide recommended in the previously mentioned guidelines. Herbicide treatment needs to be conducted before the plant can set seed each year when it finishes flowering.

Table 18: Priority Pest Actions – Mother of millions

Action	Who	When	Success Indicators
Treat infestations on land within the region as a priority particularly around and outside containment lines.	LH	Ongoing	Number of treatments.
Notify Council and Seqwater where applicable of any infestation within the region.	All, BCF	Ongoing	Number of notifications.
Define containment lines for Mother of millions in the region and give priority to control and treatment within these areas.	SRC BQ, LH	Each year and ongoing	Containment lines defined and maintained Number of treatments.
Promote identification and control of Mother of millions to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Regularly inspect roads and reserves and Council leased land and treat any Mother of millions plants that are found with a high priority for control.	SRC	Ongoing	Number of inspections / treatments.
Conduct surveys to locate and record all known and new infestations using the GPS mapping system.	SRC	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	On going	Procedures implemented.
Develop an enforcement program covering sites of present and past infestations and areas around containment lines. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Program developed.
Check for infestations of Mother of millions whilst conducting inspections during development applications for subdivisions.	SRC	Ongoing	No. of infestations detected.

Water hyacinth, *Eichhornia crassipes* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Water hyacinth is a free floating waterweed that is primarily spread by food water. Water hyacinth has a fibrous root system and dark green rounded leaves up to 5cm in diameter producing light purple flowers with a darker blue/purple and yellow centre. Originally introduced to Australia as an aquatic ornamental plant, Water hyacinth has become a major pest of rivers and dams. Not only does it destroy native habitats and increase water loss through transpiration and reduce light infiltration that is necessary for photosynthesis in submerged aquatic plants, it also seriously depletes water bodies of oxygen, increases water loss and provides a breeding ground for mosquitoes.

Local Distribution
Water hyacinth can be found in a majority of the Region's rivers, creeks and catchments and scattered smaller dams across Somerset region.

Spread Mechanism
Water hyacinth is spread by flood water being deposited in dams, lagoons, wetlands, rivers and creeks. Monitoring a short time after flood events should allow identification of new incursions. Treatment of new infestations should then be carried out to prevent establishment.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines and targeting inflow sources of infestation and co-ordinated control.

Table 19: Priority Pest Actions- Water hyacinth

Action	Who	When	Success Indicators
Treat infestations within the region.	LH, Seqwater, DEHP	Ongoing	Number of treatments.
Development of control agreement in flowing water systems.	LH, Seqwater, DEHP	Ongoing	Number of treatments.
Notify Council and Seqwater where applicable of any infestation within the region.	All, BCF	Ongoing	Number of notifications.
Promote identification and control of Water hyacinth to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ.	Ongoing	Number of promotional / educational activities.
Conduct surveys of rivers, creeks and dams to locate and record infestations of Water hyacinth using the GPS mapping system.	SRC, Seqwater	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and	As needed	Number of plans developed.

	Seqwater		
Implement weed hygiene procedures in known infestation areas	All	On going	Procedures implemented.
Develop an enforcement program covering sites of present or past infestations of Water hyacinth. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Water hyacinth whilst conducting inspections during development applications for sub divisions.	SRC	Ongoing	Number of infestations detected.

Water lettuce, *Pistia stratiotes* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Water lettuce is a free floating aquatic weed that rapidly forms dense mats covering rivers, creeks and dams that is primarily spread by flood water. As the name suggests, the entire plant resembles a small, floating, open head of lettuce. The aquatic perennial is spongy and consists of a floating rosette of pale green fan shaped leaves covered with small hairs. Water lettuce has long roots that, when a dense mat has formed, can restrict the flow of water and increase water loss through transpiration and reduce light infiltration that is necessary for photosynthesis in submerged aquatic plants.

Local Distribution
Water lettuce can be found in Somerset and Wivenhoe Dams, the Brisbane River south of Wivenhoe and a few isolated dams scattered across the south of the region

Spread Mechanism
Water lettuce is spread by flood water being deposited in dams, lagoons, wetlands, rivers and creeks. Monitoring a short time after flood events should allow identification of new incursions. Treatment of new infestations should then be carried out to prevent establishment.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines and targeting inflow sources of infestation and co-ordinated control.

Table 20: Priority Pest Actions- Water lettuce

Action	Who	When	Success Indicators
Treat infestations on land within the region.	LH, Seqwater	Ongoing	Number of treatments.
Development of control agreement in flowing water systems.	LH, Seqwater, DEHP	Ongoing	Number of treatments.

Notify Council and Seqwater where appropriate of any infestation within the region.	All, BCF	Ongoing	Number of notifications.
Promote identification and control of Water lettuce to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Conduct surveys of rivers, creeks and dams to locate and record infestations of Water lettuce using the GPS mapping system.	SRC Seqwater	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	On going	Procedures implemented
Develop an enforcement program covering sites of present or past infestations of Water lettuce. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Water lettuce whilst conducting inspections during development applications for subdivisions.	SRC	Ongoing	Number of infestations detected.

Salvinia, *Salvinia molesta* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Salvinia molesta is listed as a Weed of National Significance (WONS) because it can rapidly form mats that completely cover water storages, affecting water quality, water flow, wildlife, irrigation and recreational activities. Salvinia is primarily spread by flood waters. Salvinia is a free floating aquatic fern, with small, spongy, green leaves positioned in pairs along a common stem. The surface of each leaf is covered with long, stiff, water repellent hairs. When the plant matures the leaves become thick and fold at the mid-rib.

Local Distribution
Salvinia can be found in the Stanley River, May Smokes Creek, Somerset and Wivenhoe Dams and the Brisbane River south of Wivenhoe.

Spread Mechanism
Salvinia is spread by flood water being deposited in dams, lagoons, wetlands, rivers and creeks. Monitoring a short time after flood events should allow identification of new incursions. Treatment of new infestations should then be carried out to prevent establishment.

Control Information

Control activities are conducted in accordance with the recommendations of the Pest Facts brochure and by targeting inflow sources of infestation. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines. The use of Biological control is also highly recommended with the use of a Salvinia weevil Crytbagous salviniae. It is best to introduce the weevils during spring to ensure maximum build up of numbers.

Table 21: Priority Pest Actions- Salvinia

Action	Who	When	Success Indicators
Treat infestations on land within the region.	LH, Seqwater	Ongoing	Number of treatments.
Development of control agreement in flowing water systems.	LH, Seqwater, DEHP	Ongoing	Number Of treatments.
Notify Council and Seqwater where appropriate of any infestation within the region.	All	Ongoing	Number of notifications.
Promote identification and control of Salvinia to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Conduct surveys of rivers, creeks and dams to locate and record infestations of Salvinia using the GPS mapping system.	SRC Seqwater	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas.	All	On going	Procedures implemented.
Develop an enforcement program covering sites of present or past infestations of Salvinia. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Salvinia whilst conducting inspections during development applications for sub divisions.	SRC	Ongoing	Number of infestations detected.

Groundsel bush, *Baccharis halimifolia* (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Groundsel bush is a densely branched shrub usually no more than 3m high. Stems are green maturing to brown and woody, leaves are dull green, alternate, wedge shaped, 2.5-5cm long, 1-2.5cm broad with a few lobes in the upper part. Groundsel bushes rapidly colonise disturbed areas, especially overgrazed pastured. It competes with pasture species for water and nutrients. It spreads rapidly from windborne seed making clearing Groundsel bush from paddocks a very time consuming and expensive task. One two metre tall plant can produce up to half a million seeds that are spread by wind. The seeds look like thistle seeds and can disperse many kilometres from the mother plant.

Local Distribution
Groundsel bush is found scattered across the region from isolated plants to small infestations.

Spread Mechanism
Groundsel seeds are readily transported by wind, running water, vehicles and machinery.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines. There are seven biological control agents that have been released since 1967. Out of thirty-five that have been tested the presence of these bio-control agents does not relieve landholders from their responsibility under the Queensland legislation to control declared plants.

Table 22: Priority Pest Actions- Groundsel

Action	Who	When	Success Indicators
Treat infestations on land within the region as a priority.	LH	Ongoing	Number of treatments.
Notify Council of any infestation within the region.	All	Ongoing	Number of notifications.
Promote identification and control of Groundsel bush to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Regularly inspect roads and reserves and Council leased land and treat any Groundsel bush that is found with a high priority for control.	SRC	Ongoing	Number of inspections / treatments.
Conduct surveys to locate and record all known and new infestations using the GPS mapping system.	SRC	Each year	Number of existing and new infestations mapped.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Implement weed hygiene procedures in known infestation areas	All	Ongoing	Procedures implemented.

Develop an enforcement program covering sites of present or past infestations of Groundsel bush. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Groundsel bush whilst conducting inspections during development applications for sub divisions.	SRC	Ongoing	Number of infestations detected.

Prickly pear, *Opuntia, Nopalea and Acanthocereus* species (declared Class 2)

Operational Objective: To contain and reduce

Background Information
Prickly pear is a cactus plant growing from 1.5m-3m high that can form in large clumps. Prickly pear is spread by seed from the fruit and from pads (joints, segments) that are broken off by animals and carried by the animal or on flood water, take root and produce new shoots. Prickly pear was introduced into Australian pastoral districts in the 1840s. By 1925 the pest had invaded over 24 million hectares. Research for biological control agents commenced in 1912, and in 1914 Cochineal insects were released to control one of the minor Prickly pear species. The success of the Cochineal insect led to more research efforts and the release of a moth Cactoblastis cactorum that is still evident in plants across Somerset Region today.

Local Distribution
Scattered across the region from isolated plants to small infestations.

Spread Mechanism
Prickly pear reproduces both sexually and asexually. Birds and other animals readily eat the many seeded fruits and deposit seeds in their droppings. Asexual reproduction (cloning) of Prickly pear occurs when pads (joints, segments) or fruits located on the ground take root and produce shoots. Animals and floods move broken pads long distances. These pads can survive long periods of drought before weather conditions allow them to set roots.

Control Information
Control activities are conducted in accordance with the recommendations of the Pest Facts brochure. In the Somerset Region this primarily involves herbicide treatment, using the herbicide recommended in the previously mentioned guidelines The presence of these bio-control agents does not relieve landholders from their responsibility under the Queensland legislation to control declared plants.

Table 23: Priority Pest Actions- Prickly pear

Action	Who	When	Success Indicators
Treat infestations on land within the region as a priority.	LH	Ongoing	Number of treatments.
Notify Council of any infestation within the region.	All	Ongoing	Number of notifications.
Promote identification and control of Prickly	SRC,	Ongoing	Number of

pear to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SEQC and BQ		promotional / educational activities.
Regularly inspect roads and reserves and Council leased land and treat any Prickly pear plants that are found with a high priority for control.	SRC	Ongoing	Number of inspections / treatments.
Introduce Cactoblastis moth into Prickly pear infestations that are not affected by the moth.	BQ, SRC, LH	Ongoing	Number of locations infested.
Develop property pest management plans in consultation with landholder for larger infestations.	SRC, LH, SEQC and Seqwater	As needed	Number of plans developed.
Develop an enforcement program covering sites of present or past infestations of Prickly pear. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to remove the pest plant.	SRC	Each year	Development on program.
Check for infestations of Prickly pear whilst conducting inspections during development applications for sub divisions.	SRC	Ongoing	Number of infestations detected.

4.4 Regional Priority Pest Actions – Animals

The following section lists priority pest actions, assigns stakeholder responsibility and provides further information on the top 6 priority pest animals in the region. Declared pest animals which have a lower priority rating will be controlled where possible with landholder assistance and in accordance with the requirements of the Act.

Dingo / Hybrid Wild Dog (declared Class 2)

Operational objective: To control and reduce impacts

Background information

Wild Dogs are treated as a high priority because they impact directly on the local economy and environment by indiscriminately killing and maiming farm stock and native animals. In residential areas they attack and kill domestic pets and may pose a threat to humans. Topographically the Somerset Region provides the ideal habitat for wild dogs to survive and traverse the region with ease due to the amount of forested areas. Riparian zones and hilled open country provides them with protected corridors to travel from property to property undetected.

Local Distribution

Wild dogs are widespread across the region in scattered numbers.

Control information

There are many control activities that can be undertaken to control or prevent wild dog attacks.

To increase baiting effectiveness it is essential that baiting programs be coordinated among adjoining properties. Baiting individual properties may result in reducing wild dog numbers in the short term but the benefits of this will be short lived due to rapid reinvasion.

Table 24: Priority Pest Actions- Dingo/Hybrid Wild Dog

Action	Who	When	Success Indicators
Take all reasonable steps to control dingo/hybrid wild dogs in line with government guidelines.	LH	Ongoing	Number of dogs destroyed. Reduced reports of stock attacks.
Wherever possible work with neighbours by conducting joint coordinated control programs	All	Ongoing	Number of joint programs conducted.
Take reasonable steps to ensure the safety of easy target stock. It is highly recommended that stock such as sheep and goats be placed in a dog proof yard with guardian dog/s of a night time to ensure their safety.	LH	Ongoing	Number of dog proof yards provided. Number of guardian dogs provided.
Promote identification and control of dingo/hybrid wild dogs to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Conduct 1080 baiting program for the region.	SRC and BQ	April, June September and December.	Number of dogs destroyed. Reduced reports of stock attacks. Feedback from landholders on dogs numbers.
Provision of reactive 1080 baiting when required.	SRC and BQ	As required.	Number of dogs destroyed. Reduced reports of stock attacks. Feedback from landholders on dog numbers.
Operate a wild dog bounty incentive program for dingo/hybrid scalps.	SRC	Ongoing	Number of bounties claimed (relative to estimated dog numbers).
Provision of advice on trapping, cage traps, or carrying out of foot hold trapping in extreme circumstances for properties that donot meet the distance requirements for 1080 or strychnine baiting.	SRC and BQ	Ongoing	Number of cages or traps provided.

Rabbits, *Oryctolagus cuniculus* (declared Class 2)

Operational Objective: To control and reduce

Background Information
Rabbits are one of Australia's major agricultural and environmental animal pests. They compete with native animals for food and burrow space. As a result they have led to the extinction of many native animals. By grazing on native vegetation and burrowing, they are also a primary cause of soil erosion. Rabbits impact on the agricultural industry by grazing on pastures and thus limiting the quantity of feed available to livestock. This is a particular problem in times of drought, when rabbits can consume the majority of vegetation available.

Local Distribution
Rabbits are scattered in small colonies throughout the region. Rabbits are a problem in the southern and western areas of the State. It is of high priority to reduce and eventually remove the rabbit population in the clean areas north of the rabbit fence and to maintain the area free of rabbits.

Control Information
The number of rabbits in the Somerset Region is small due to the hard ground and healthy population of predatory animals and raptors, as well as the continued efforts of Council's Pest Management team trapping and utilising biological control agents such as Myxomatosis and Rabbit Haemorrhagic Disease Virus and the continued destruction and gassing of warrens where ever possible, and Pindone and 1080 baiting control.

Table 25: Priority Pest Actions: Rabbits

Action	Who	When	Success Indicators
Take all reasonable steps to control rabbits as a high priority in line with government guidelines.	Landholder	Ongoing	Number of rabbits destroyed/other controls instigated.
Notify Council of any rabbit infestation location for mapping purposes and guidance in the strategic management of the colony.	All	Ongoing	Number of infestations reported.
Promote identification and control of rabbits to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Conduct surveys to locate any new or monitor any existing rabbit colonies using the GPS mapping system.	SRC	Each year	Number of new infestations mapped.
Provide advice/assistance in best practice management options to landholders (ie. trapping, shooting, fencing, gassing, biological controls and baiting)	SRC and BQ	Ongoing	Number of actions.
Regularly inspect roads and reserves and Council leased land and destroy any rabbit habitats that are found with a high	SRC	Ongoing	Number of inspections / destroyed habitats

priority for control.			
Develop an enforcement program covering sites of present or past infestations of rabbits. This should include inspecting the site, and if required issue notices, conduct re-inspections, issue entry notices and complete the required work to destroy the rabbit infestation.	SRC	Each year	Development of the program.
Check for infestations of rabbits whilst conducting inspections during development applications for sub-divisions.	SRC	Ongoing	Number of infestations detected.

Feral pig, *Sus scrofa* (declared Class 2)

Operational Objective: To control and reduce

Background Information
Domestic pigs (Sus scrofa) were introduced to Australia by early settlers. Subsequent accidental and deliberate releases resulted in the wild (feral) population established throughout Australia. Feral pigs damage crops, stock and property, spread weeds and transmit diseases such as Leptospirosis and Foot and Mouth. They also cause environmental damage, digging up large areas of native vegetation. Colouring is predominantly black, buff coloured or spotted black and white.

Local Distribution
Feral pigs are scattered across the region, living mainly in and around the National Parks, State forests and creek and river systems which provides them with a means of traversing the region undetected. The feral pig population within the Somerset Region is highly mobile and nomadic in their search for food.

Control Information
The strategic management of feral pigs is aimed at minimising the damage they cause to primary production and conservation areas, not merely to kill pigs. Strategic management involves four key components - Defining the problem, Management plan, Implementation then Monitoring and evaluation. Feral pigs' reproduction is such that repeated control programs must be conducted before any sustained population reduction is achieved. Home ranges are large, between 2 and 50km^2, thus control programs need to be conducted over a large area to be effective.

Table 26: Priority Pest Actions- Feral Pigs

Action	Who	When	Success Indicators
Take all reasonable steps to control pigs in line with government guidelines.	LH	Ongoing	Number of pigs destroyed/other controls instigated.
Whereever possible work with neighbours by conducting joint control programs.	All	Ongoing	Number of joint programs conducted.

Promote identification and control of feral pigs to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Provision of reactive 1080 baiting when required.	SRC and BQ	Complaint based.	Number of baits issued.
Provision of cage traps for properties.	SRC, and Seqwater	As required.	Number of cages or traps provided.
Develop an enforcement program to control the introduction and keeping of feral pigs.	SRC	Each year	Development of the program. Number of enforcements.

European fox, *Vulpes vulpes* (declared Class 2)

Operational Objective: To control and reduce

Background Information
The most common and widespread of the world's many fox species is the European red fox. Foxes are a major pest species in Australia that threaten agricultural and native species alike. Foxes have pointed skulls, flattened slender skulls, large ears and long bushy tails. The European red fox was deliberately introduced into Australia in 1845. Next to wild dogs, the fox is the largest land-dwelling carnivorous mammal in Australia. Foxes breed once a year in spring. Cubs are generally born in burrows but litters have been found in hollow trees and rock crevices. The average litter size ranges from 4 to a maximum of 10.

Local Distribution
Foxes can be found scattered across the Somerset Region. They dig dens in the banks of creeks and rivers.

Control Information
Current options available for control of foxes in Queensland include poisoning, trapping, shooting, guard animals and exclusion fencing. The choice of control method should suit individual circumstances.

Table 27: Priority Pest Actions- Fox

Action	Who	When	Success Indicators
Take all reasonable steps to control foxes in line with government guidelines.	LH	Ongoing	Number of foxes destroyed/other controls instigated.
Wherever possible work with neighbours by conducting joint coordinated 1080 baiting programs.	All	Ongoing	Number of joint programs conducted.
Promote identification and control of European foxes to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.

Provision of reactive 1080 baiting when required.	SRC and BQ	Complaint based.	Number of baits issued.
Provision of cage traps, or carry out foot hold trapping in extreme circumstances for properties that do not meet the distance requirements for 1080 or strychnine baiting council can provide	SRC and BQ	As required.	Number of cages or traps provided.
Take reasonable steps to ensure the safety of easy target fowl. It is highly recommended that stock such as chickens and ducks be placed in a fox proof yard at night time to ensure their safety.	All	Ongoing	Number of fox proof yards provided.

Feral Cat*, Feris catus* (declared Class 2)

Operational Objective: To control and reduce

Background Information
Although the domestic cat has a long history of association with man, it retains a strong hunting instinct and can easily revert to a wild (feral) state when abandoned or having strayed from a domestic situation. Legislation describes a feral cat as one that is not fed and kept by someone. The word 'kept' specifically means that the cat is housed in a domestic situation. The energy expended by an adult male cat requires it to consume 5%-8% of its body weight in prey per day, while females raising kittens require 20%. The feral cat is an opportunistic predator, and dietary studies have shown that small mammals, birds, reptiles, amphibians, insects and even fish can be taken as prey.

Local Distribution
Feral cats can be found scattered across Somerset Region.

Control Information
Current options available for control of feral cats in Queensland include poisoning, trapping, shooting and exclusion fencing. The choice of control method should suit individual circumstances.

Table 28: Priority Pest Actions- Feral Cats

Action	Who	When	Success Indicators
Take all reasonable steps to control feral cats in line with government guidelines.	LH	Ongoing	Number of feral cats destroyed/other controls instigated.
Take reasonable steps to ensure the safety of easy target animals. It is highly recommended that animals such as fowl and birds be placed in a cat proof enclosure of a night time to ensure their safety.	LH	Ongoing	Number of cat proof enclosures provided.
Promote identification and control of feral cats to community and within Council by	SRC, SEQC	Ongoing	Number of promotional /

distribution of 'pest facts' and inclusion in promotion and education activities.	and BQ		educational activities.
Provision of cage traps.	SRC and BQ	As required.	Number of cages or traps provided.

Rusa Deer, *Cervus timorensis* (declared Class 2)

Operational Objective: To control and reduce

Background Information
It is an offence under the Act to introduce, keep, supply or release Class 2 pest animals without a permit. Rusa deer that are contained within a deer-proof fence, for example farmed Rusa or Rusa held by a game park are not declared. Any Rusa not contained within a deer proof fence are considered feral and wild and subject to control under the *Land Protection (Pest and Stock Route Management) Act 2002*.

Local Distribution
Rusa deer can be found in strong numbers through the North Western ranges that go from Jimna through to Bellthorpe; isolated herds have been sighted in the Linville area.

Control Information
The feral or wild Rusa deer is a declared Class 2 pest animal, under the *Land Protection (Pest and Stock Route Management) Act 2002* and landholders are required to control numbers on their land.

Table 29: Priority Pest Actions-Rusa Deer

Action	Who	When	Success Indicators
Take all reasonable steps to control Rusa Deer in line with government guidelines.	LH	Ongoing	Number of Rusa Deer destroyed/other controls instigated.
Promote identification and control of Rusa Deer to community and within Council by distribution of 'pest facts' and inclusion in promotion and education activities.	SRC, SEQC and BQ	Ongoing	Number of promotional / educational activities.
Whereever possible work with neighbours by conducting joint coordinated control programs.	LH	Ongoing	Number of joint programs conducted.
Develop an enforcement program to control the release of Rusa Deer.	SRC	Each year	Development of the program. Number of enforcements.

4.5 Mapping and Data Management
Pest Management Officers will collect mapping data as described in the priority pest actions listed above. Somerset Regional Council will develop and maintain a database to show:

- Location of declared weeds showing the type and density.
- Land where 1080 baits have been distributed.
- Land where pest animal trapping or eradication has occurred.

Mapping data will be used to guide pest management planning and allocation of Council resources.

4.6 Education and Awareness

Somerset Regional Council continues to be involved in pest management education and awareness programs in conjunction with Biosecurity Queensland to increase awareness and promote education of all stakeholders. Council currently conducts or is involved in the following pest education and awareness activities:

- Provision of 'pest fact sheets' at Council office buildings and through Council's website.
- Participation in weed buster week.
- Conducting field days on selected properties.
- Displays at local shows.
- Distribution of pest information and information sessions to Council Staff and contractors.
- Presentations to schools.

4.7 Projects and External Funding

Council and other stakeholders have limited resources available to meet the objectives of this plan and therefore will actively seek project funding opportunities and opportunities to work collaboratively on projects during the life of the Pest Management Plan. Funding will be sought from Federal and State Government Agencies and other appropriate entities. Projects which are currently delivered partly or in whole by external funding, and/or are collaborative projects, are:

- Parthenium project in partnership with DEEDI, SEQ Water and SEQ Catchments.
- Powerlink funding for the control of Parthenium under power lines.
- Main Roads RMPC Element 5 declared weed control.

4.8 Environmentally Significant Areas

The *Land Protection (Pest and Stock Route Management) Act 2002* defines an Environmentally Significant Area as:

A. A protected area;
B. Land dedicated as a reserve for environmental purposes under section 31 of the Land Act;
C. A world heritage area listed under the World Heritage Convention;
D. An area supporting a critically endangered or endangered ecological community in the list established under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth), section 181;
E. A declared Ramsar wetland under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth);
F. An area of high conservation value under the Vegetation Management Act 1999, and
G. An area, other than State-controlled land, identified in a local government's pest management plan as an area that has special environmental significance for native wildlife
H. A wild river area.

Under the Act, landowners have an obligation to take reasonable steps to keep their land free of Class 1 and 2 declared pests. Additionally owners of Environmentally Significant Areas and

owners of land adjoining an Environmentally Significant Area have the additional obligation to control Class 3 declared pests that have the potential to cause an adverse economic, environmental or social impact on the Environmentally Significant Area (where the Environmentally Significant Area is free of the Class 3 pest).

Aquatic Environments

The Somerset Regional Council area is set between the D'Aguilar and Conondale Ranges to the East, the Yabba, Kadanga Ranges to the North and the Brisbane, Blackbutt and Balfour Ranges to the West. These ranges form the major part of the region's two major catchments; the Brisbane river catchment and the Stanley River catchment. A list of the major aquatic environments that are located in the Somerset Regional Council area are detailed in Appendix E.

All aquatic environments listed are to be included in the annual pest survey programs primarily targeting Class1 and Class 2 declared aquatic weeds.

4.9 Pest Management on Private and Leasehold Land

Somerset Regional Council has a total area of 5379 square kilometres comprising of 1578 square kilometres of reserve land, 3498 square kilometres of freehold and 303 square kilometres of leasehold land. All landholders have an obligation to control pest animal and plant infestations contained on land under their control and that includes Federal, State and Local Governments.

Council mapping data and officer observations indicate that a major portion of pest plant and animal infestations are contained on the approximate 3800 square kilometres of freehold and leasehold land. Council will work collaboratively with landholders of private freehold and leasehold land that have infestations of declared pest plants or animals to implement measures to control and reduce pest infestations. This may involve Council requiring landholders to produce and implement property pest management plans for pests that require control, to set out how infestations will be controlled and reduced over time. Council will endeavour to develop incentive programs to assist landholders in pest management activities which may include programs that provide chemical subsidies, access to weed control equipment and animal trapping equipment and animal bounty programs. Council currently operates the following incentive programs to assist landholders with pest management activities:

- Chemical subsidy program for the control of Annual ragweed, Giant rats tail grass, Parthenium and Mother of millions
- Pest spray equipment hire program.
- Dingo/wild dog bounty program.

In situations where landholders do not take reasonable steps to control pests in accordance with actions listed in the Pest Management Plan and required under the *Land Protection (Pest and Stock Route Management) Act 2002*, Council may instigate enforcement action generally in accordance with the enforcement procedures contained in appendix D.

Declared Pest Animal Management

Landholders have obligations under the *Land Protection (Pest and Stock Route Management) Act 2002* to control declared pest animals on their land. Council can provide assistance to landholder and undertakes an integrated pest management approach to controlling declared pest animals, which includes surveillance, education, baiting and trapping. Council charges no fee for these services, however services may be refused where a landholder has previously failed to carry out their responsibilities in accordance with the *Land Protection (Pest and Stock Route Management) Act 2002.*

Controlling populations of pest animals can be difficult and resource-intensive however, Council's Pest Animal Program aims to assist landholder in the control of pest animal populations.

The specific activities undertaken are as follows:

A) Surveillance - Council undertakes an annual Pest Survey Program and also relies on public notifications of pest animal sighting.
B) Education - Council provides advice to residents on control techniques and how to protect stock and remove attractants.
C) Trapping - Council uses soft jaw and cage traps at targeted locations.
D) Baiting - Council uses baits impregnated with poisons (eg. 1080, strychnine and pindone) in accordance with Queensland Health directives. The use of alternative control methods are recommended to occupiers prior to use of poisoned baits.
E) For the control of rabbits Council utilises biological control agents.

Declared Pest Inspection Program
A component of effectively managing pests in Somerset is the surveillance of areas that may harbour declared pests and the early detection of new infestations. Council will conduct a series of rolling Declared Pest Inspection Programs over the next four years across the region with the aim of monitoring known infestations and detecting new infestations of declared pest.

Table 30 below illustrates the times of the year inspection and treatment programs are critical for the control of specific declared pest plants. The table also differentiates when regular and minimal control is required.

Declared Class 1 Plant	Summer (Dec—Feb	Autumn (Mar—May)	Winter (Jun—Aug)	Spring (Sep—Nov)
Alligator weed				
Hygrophila				
Honey locust				
Water Mimosa				
Mexican Bean Tree				
Senegal Tea				
Mexican feather grass	Treated by Biosecurity Queensland as part of Emergency Response procedure			
Declared Class 2 Plant	**Summer (Dec—Feb)**	**Autumn (Mar—May)**	**Winter (Jun—Aug)**	**Spring (Sep—Nov)**
Annual ragweed				
Fireweed				
Parramatta Grass spp				
Giant rats tail grass				
Groundsel bush				
Mother of millions				

Salvinia				
Parthenium				
Water hyacinth				
Water lettuce				
Hymenachne				

*This table should be read in conjunction with Appendix C, which details the lifecycle, flowering period and treatment methods for each declared pest plant located in Somerset.

LEGEND: -

Critical control/Intensive Inspection Period (Pre-flowing/Severe Growth period)

Regular Control/Routine Inspection Conducted (Regular plant growth)

Minimal Control/No inspection Conducted (Minimal at no plant growth)

4.10 Reporting and Review of Plan

This plan will be assessed annually by the Pest Management Committee in consultation with the Key Stakeholder Reference Group to assess the effectiveness of the plan and make amendments if necessary. Council will also produce and review an annual operational plan and make amendment having regard to budget, priorities and available resources.

5.0 References

Department of Primary Industries and Fisheries, 2009.
Resource Kit for Local Government Area Pest Management Plans.
Esk Shire Council, 2005. Local Government Area Pest Management Plan 2005-2009.
Kilcoy Shire Council, 2005. Local Government Area Pest Management Plan 2005-2009.
Whitsunday Regional Council, 2010. Whitsunday Regional Council Pest Plan 2010-2015.

6.0 Appendix

APPENDIX A

COMPLETE LIST OF QUEENSLAND'S DECLARED Weeds PESTS Weeds of National Significance and Species on the National Environmental Alert List in Queensland and Environmental Weeds that Cause Significant Impacts in the Somerset Region

Class 1 pest plants are serious weeds, not generally established in Queensland.
If found or suspected, Council must be notified immediately. Do not destroy the plant before a specimen has been taken to confirm identification. Once identified, the weeds must be destroyed by either Biosecurity Queensland or Council. The following table lists all plants declared as Class 1 pest plants in Queensland. Class 1 pest plants known to exist in Somerset are marked with an asterisk (*).

Class 1 Declared Pest Plants of Queensland
(*Indicates Declared Plants found in Somerset Region)

Common Name	*Species Name*	Common Name	*Species Name*
Acacias non-indigenous to Australia	*Acacia spp. Other than Acacia nilotica and Acacia farnesiana)*	Madras Thorn	*(Pithecellobium dulce)*
Alligator Water Hyacinth	*(Eichhornia Azurea)*	Mesquites	*(All Prosopis spp. and hybrids other than Prosopis Glandulosa, Prosopis Pallida and Prosopis Velutina)*
Anchored Water Hyacinth	*(Eichhornia azurea)*	Miconia	*(Miconla spp.)*
Badhara Bush	*(Gmelina ellitica)*	Mikania Vine	*(Mikania spp.)*
Bitou Bush	*(Chrysanthemoides Monilifera Subsp. Rotundata)*	Myrica	*(Myrica Faya)*
Bridal Creeper	*(Asparagus Asparagoides)*	Peruvian Primrose	*(Ludwigia Peruviana)*
Chilean Needle Grass	*(Nassella Neesiana)*	Piper	*(Piper Aduncum)*
Christ's Thorn	*(Ziziphus Spina-christi)*	Red Sesbania	*(Sesbania Punicea)*
Eurasian Water Milfoil	*(Myriophyllum Spicatum)*	Salvinias	*(Salvinia spp. Other than S. molesta)*
Floating Water Chestnuts	*(Trapa spp.)*	Senegal Tea	*(Gymnocoronis Spilanthoides)*
Gorse	(Ulex Europaeus)	Serrated Tussock	*(Nassella Trichotoma)*
Honey locust *	*(Gleditsia spp. Including cultivars and varieties)*	Siam Weed	*(Chromolaena spp.)*
Horsetails	*(Equisetum spp.)*	Thunbergia	*(Thunbergia Annua, T. fragrans and T. laurifolia)*
Hygrophila	*(Hygrophila Costata)*	Water Soldiers	*(Stratiotes Aloides)*

Kochia	*(Kochia Scoparia Syn Bassia Scoparia)*	Willow	*(Salix spp. Other than S. Babylonica, S. Chilensis (syn. S. Humboldtiana), S.Matsudana, S. x Calodendron and S. x Reichardtii*
Koster's Curse	*(Clidemia Hirta)*	Witch Weeds	*(Striga spp. Other than native species)*

Class 2 Declared Pest Plants of Queensland.
The objective is to prevent these weeds from spreading to other properties and to keep them under control, working towards getting rid of them completely.

The following table lists all plants declared as class 2 pest plants in Queensland. Class 2 pest plants known to exist in Somerset are marked with an asterisk (*).

Class 2 Declared Pest Plants of Queensland
(*Indicates Declared Plants found in Somerset Region)

Common Name	***Species Name***	**Common Name**	***Species Name***
African boxthorn*	*(Lycium Ferocissimum*	Mother of millions*	*(Bryophyllum Delagoense and B. Daigremontianum x B. Delagoense; Syn. Bryophylllum Tubiflorum and B. Daigremontianum x B. Tubiflorum)*
American Rat's Tail Grass	*(Sporobolus Jacquemontii)*	Parkinsonia	*(Parkinsonia Aculeata)*
Annual ragweed*	*(Ambrosia Artemisiifolia)*	Parramatta Grass*	*(Sporobolus Africanus)*
Bellyache Bush	*(Jatropha Gossypiifolia)*	Parthenium*	*(Parthenium Hysterophorus)*
Cabomba	*(Cabomba spp.)*	Pond Apple	*(Annona Glabra)*
Chinee Apple	*(Ziziphus Mauritiana)*	Prickly acacia	*(Acacia Nilotica)*
Fireweed*	*(Senecio Madagascariensis)*	Prickly pear*	*(Opuntia spp. Other than O. Ficus-indica)*
Giant Parramatta Grass	*(Sporobolus Fertilis)*	Rubber Vine*	*(Cryptostegia Grandiflora)*
Giant rat's tail grass*	*(Sporobolus Pyramidalis and S. Natalensis)*	Salvinia*	*(Senna Obtusifolia, Senna Hirsuta and Senna Tora)*
Giant Sensitive Plant	*(Mimosa Diplotricha Var. diplotricha)*	Sicklepods	*(Senna Obtusifolia, Senna Hirsuta and Senna Tora)*

Groundsel bush*	*(Baccharis Halimifolia)*	Thunbergia	*(Thunbergia Grandiflora)*
Harrisia Cactus	*(Eriocereus spp.)*	Tobacco Weed*	*(Elephantopus Crassipes)*
Hymenachne*	*(Hymenachne Amplexicaulis)*	Water lettuce*	*(Pistia Stratiotes)*
Mesquites	(Prosopis Glandulosa,P. Pallida and P. Velutina)		

Class 3 Pest Plants

Land owners must manage these weeds, especially if the land is a dedicated Environmentally Significant Area or adjacent to an Environmentally Significant Area. In all other areas, land owners are asked to manage to contain and reduce the infestation but there is no legal obligation to do so.

Class 3 Declared Pest Plants of Queensland

(*Indicates Declared Plants found in Somerset Region)

Common Name	*Species Name*	Common Name	*Species Name*
African fountain grass	*(Pennisetum Setaceum)*	**Chinese celtis**	*(Celtis Sinensis)*
African tulip tree*	*(Spathodea Campanulata)*	**Dutchman's pipe**	Aristolochia tomentosa
Aristolochia or Dutchman's pipe	*(Aristolochia spp. Other than native species)*	**Harungana**	*(Harungana Madagascariensis)*
Asparagus fern	*(Asparagus Aethiopicus 'Sprengeri', A. Africanus and A. Plumosus)*	**Lantana ***	*(All species) (Lantana spp.)*
Athel pine	*(Tamarix Aphylla)*	**Madeira vine**	*(Anredera Cordifolia)*
Balloon vine	*(Cardiospermum Grandiflorum)*	**Pencil Willow**	*(Salix Chilensis; syn. S. Humboldtiana)*
Blackberry	*(Rubus Anglocandicans, Rubus Fruticosus Agg.)*	**Privets ***	*(Ligustrum Lucidum and L. Sinese)*
Broad-leaved Pepper Tree*	*(Schinus Terebinthifolius)*	**Purple Rubber Vine**	*(Cryptostegia Madagascariensis)*
Camphor laurel*	*(Cinnamomum Camphora)*	**Singapore daisy***	*(Sphagneticola Trilobata; syn. Wedelia Trilobata)*
Captain Cook Tree	*(Thevetia Peruviana)*	**Tortured Willow**	*(Salix Matsudana)*
Cat's Claw Vine *	*(Macfadyena Unguis-cati)*	**Yellow bells**	*(Tecoma Stans)*

***Note*: Declaration of Class 3 species came into force on 1 November 2003.**

This list is current at 2 September 2004, but new declarations of plants and/or changes in plant declaration can occur at any time.

Further Information
Further information is available from the vegetation management/weed control/environmental staff at your local government.

Fact sheets are available from NRMA service centres and the NRMA Information Centre phone (0732371435). Check our web site www.nrm.qld.gov.au to ensure you have the latest version of this fact sheet. While every care is taken to ensure the accuracy of this information, the Department of Natural Resources, Mines and Water does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actins based on it.

Animal Species Declared by the State

(*Indicates Animals found in Somerset Region)

Common Name	Control Priority Level	Declaration Status	Distribution	Control Status
*European rabbit	High	Class 2	Scattered	Trapping, habitat destruction and Biological control programs are on going
*Cat, other than domestic cat	Medium	Class 2	Scattered	Council undertakes control programs as infestations are located
*Dingo / Wild dog	High	Class 2	Scattered	Council undertakes control programs and advice to land holders
*European fox	Low	Class 2	Scattered	Council undertakes control programs and advice to land holders
*Feral pig	Medium	Class 2	Scattered	Council undertakes control programs and advice to land holders
*Rusa deer	Medium	Class 2	Isolated	
* Fallow deer	Medium	Class 3	Isolated	
* Red deer	Low	Class 3	Widespread	
Australian Plague Locust	Low	Class 2	No current infestation known	Not applicable
Spur throated locust	Low	Class 2	No current infestation known	Not applicable
Migratory locust	Low	Class 2	No current infestation known	Not applicable
Red-Eared Slider Turtle			No current infestation	

			known	
Feral goat			No current infestation known	
*Red Imported Fire Ant	High		Nil	
Yellow crazy ant			No current infestation known	
Ferret	High	Class 1	No current infestation known	Not applicable

Weeds of National Significance

The Weeds of National Significance (WONS) program is a proactive approach to strategic management of priority weeds that pose present and future threats to primary industries, land management, human or animal welfare, biodiversity and conservation values.

Common Name	Species Name	Distribution	Potential Distribution
Alligator weed	Alternanthera philoxeroides	WA, NT, QLD, NSW, VIC, SA, TAS	Could further expand in current locations
Athel pine	Tamarix aphylla	WA, NT, QLD, NSW, VIC, SA	Could further expand in current locations
Bitou bush	Chrysathemoides monilifera	WA, QLD, NSW, VIC, SA, TAS	Could further expand in current locations
Blackberry	Rubus fruiticosus agg	WA, QLD, NSW, VIC, SA, TAS, ACT	Could further expand in current locations
Bridal creeper	Asparagus asparagoides	WA, NSW, VIC, SA, TAS	Could further expand in current locations, plus QLD, ACT
Cabomba	Camomba caroliniana	NT, QLD, NSW, VIC	Could further expand in current locations, plus WA, SA, TAS, ACT
Chilean needle grass	Nassella neesiana	NSW, VIC, SA, ACT, QLD	Could further expand in current locations, plus WA, TAS
Gorse	Ulexeuropaeus	WA, QLD, NSW, VIC, SA, TAS, ACT	Could further expand in current locations
Hymenachne	Hymenachne amplexicaulis	NT, QLD, SA	Could further expand in current locations, plus WA, NSW

Lantana	Lantana camara	WA, NT, QLD, NSW	Could further expand in current locations, plus VIC, SA, TAS
Mesquite	Prosopis spp.	WA, NT, QLD, NSW, VIC, SA	Could further expand in current locations
Mimosa	Mimosa pigra	NT, QLD	Could further expand in current locations, plus WA
Parkinsonia	Parkinsonia aculeate	WA, NT, QLD	Could further expand in current locations, plus NSW, VIC, SA
Parthenium	Parthenium hysterophorus	QLD, NSW, VIC	Could further expand in current locations, plus WA, NT, SA
Pond Apple	Annona glabra	NT, QLD, NSW	Could further expand in current locations
Prickly acacia	Acacia nilotica s.sp indica	QLD, NSW	Could further expand in current locations, plus WA, NT, SA
Rubber vine	Cryptostegia	WA, QLD	Could further expand in current locations, plus
Salvinia	Salvinia molesta	WA, NT, QLD, NSW, SA	Could further expand in current locations, plus VIC, TAS, ACT
Willow (except weeping willows, Pussy willow and sterile pussy	Salix spp. Except S. babylonica, S.x calodendron and S.x reichardtiji	NSW, VIC,ACT	Could further expand in current locations, plus SA, TAS

Species on the National Environmental Alert List in Queensland (as at February 2005)
National Environmental Alert List
The National Environmental Alert List identifies those species that are in the early stages of establishment and have the potential to become a significant threat to biodiversity if they are not managed. *New declarations of and/or changes in the list can occur at any time.*

Common Name	Species Name	Distribution
Bateria	Barleria prionitis	QLD, NT, WA
Blue hounds tongue	Cynoglossum creticum	NSW, VIC
Cane needle grass	Nassella hyalina	NSW, VIC

Chinese rain tree	Koelreuteria elegans ssp. Formosana	QLD
Clutch tree	Acacia catechu var. sundra	NT, QLD, WA
Cyperus	Cyperus teneristolon	NSW
False yellowhead	Dittrichia viscose	WA
Garden geranium	Pelargonium alchemilloides	WA
Heather	Calluna vulgaris	WA
Holly leaved Senecio	Senecio glastifolius	NSW, WA
Horsetails	Equisetum species	QLD
Karroo thorn	Acacia Karroo	QLD, NSW, SA ,WA
Kochia	Bassia scoparia	WA
Lagarosphon	Lagarosiphon major	QLD
Laurel clock vine	Thunbergia laurifolia	QLD, NT
Leaf cactus	Pereskia aculeata	QLD, NSW, WA
Lobed needle grass	Nassella charruana	VIC
Orange hawkweed	Hieracium aurantiacum	NSW, VIC, TAS
Praxelis	Praxelis clematidea	QLD
Rosewood or Tipuana	Tipuana tipu	QLD, NT, WA
Senegaltea plant	Gymnocoronis spilanthoides	QLD, NSW
Siam weed	Chromolaena odorata (weedy form)	QLD
Subterranean Cape sedge	Trianoptiles solitaria	VIC
Uruguayan rice grass	Piptochaetium montevidense	VIC
White Spanish broom	Cystisus multiflorus	VIC
White weeping broom	Retama raetam	SA, WA
Yellow soldier	Lachenalia refexa	WA

Environmental Weeds that Cause Significant Impacts in Somerset

These weeds impact on the Regions natural environment and can impact on live stock and have the ability to smother poor pastures and out compete pasture grasses reducing productivity of pastoral lands

Scientific and Common Names	Distribution across Region	Ability to Control and Reduce	Pastoral Impact	Environmental Impact
Eragrostis curvula (african Love Grass)	Abundant and Widespread	Low	High	Medium
Themeda quadrivalvis (grader grass)	Abundant and Widespread	Low	High	Medium
Paspalum notatum (Bahia grass)	Abundant and Widespread	Low	High	High
Echium plantagineum (patterson's curse)	Isolated	High	High	Medium
Cestrum parqui (green cestrum)	Scattered	Medium	High	High
Carthamus lantatus (saffron thistle)	Scattered	Medium	High	Medium
Carduus nutans subsp. (nodding thistle)	Scattered	High	High	Medium
Cirsium vulgare (spear thistle)	Scattered	Medium	High	Medium
Ricinus communis (castor oil plant)	Abundant and Widespread	Low	Low	High
Solanum mauritianum (wild tobacco tree)	Abundant and Widespread	Low	Medium	High
Ageratina riparia (mist Flower)	Scattered	Medium	Medium	Medium
Ageratina adenophora (crofton Weed)	Scattered	Medium	Medium	High
Heliotropium amplexicaule (blue heliotrope)	Abundant and Widespread	Low	Medium	High
Phyla canescens (lippia, Condamine couch)	Scattered	Medium	High	High
Amaranthus spinosis (needle burr)	Abundant and Widespread	Low	High	High
Xanthium spinosum (bathurst burr)	Scattered	Medium	High	Medium
Xanthium pungens(noogoora burr)	Scattered	Medium	High	Medium

Solanum turvum (devil's fig)	Abundant and Widespread	Low	Medium	High
Ageratum houstonianum (blue billygoat weed)	Abundant and Widespread	Low	Medium	Medium
Verbena aristigera/V.tenuisecta (mayne's pest)	Abundant and Widespread	Low	Low	Low
Verbina rigida (veined verbena)	Abundant and Widespread	Low	Medium	Medium
Verbena bonariensis (purple top verbena)	Abundant and Widespread	Low	Medium	Medium
Leucaena leucocephala (leucaena)	Scattered	Medium	Medium	High
Pinus elliottii (slash pine)	Scattered	Medium	Low	High
Argemone ochroleuca (mexican poppy)	Scattered	Low	Medium	Medium
Tipuana tipu (Rose Wood, Racehours Tree)	Scattered	Medium	Low	High
Koelreuteria elegans (Golden Rain Tree, Chinese Rain Tree)	Scattered	Medium	Low	Medium
Hyparrhenia rufa (Thatch grass)	Scattered	Medium	Medium	Medium

APPENDIX B

Pest Plant Characteristics and Methods of Control

Literature cited:

Herbicide Manufacture's label

Queensland Government Department of Primary Industries and Fisheries Fact Sheet

Queensland Government Department of Natural Resource and Water Fact Sheet

Queensland Government Department of Natural Resource and Mines Fact Sheet

Table of current control Methods for priority Environmental Weeds

Queensland Declared Pest Plants class 1
P = Perennial b = Biennial A = Annual FS = Foliar Spray CS = Cut Stump BB = Basal Bark SI = Stem injection
HR = Hand Remove BC = Biological Control MC = Mechanical Control

Species List	Growth Type	Flowering Time	Life Cycle	Reproduction and Dispersal	Control
Alligator weed	Aquatic herb	Spring—summer	P	Vegetative, water	FS
Honey locust (Gleditsia spp.)	Tree	October—November	P	Flowers/seed, stock/water	FS, CS, BB
Hygrophila (Hygrophila costata	Aquatic herb	Summer–autumn	P	Vegetative, seed, water	FS, HR
Mexican feather grass (Nassella tenuissima)	Grass	Summer	P	Flowers/seed, stock/machine	FS, HR
Senegal Tea (Gymnocoronis spilanthoides)	Aquatic	Spring—summer	P	Vegetative, seed	HR, FS
Water Mimosa (Neptunia oleracea, and N.plena	Aquatic	Summer	P	Cutting, seed, water	HR, MC

Queensland Declared Pest Plants Class 2
P = Perennial b = Biennial A = Annual FS = Foliar Spray CS = Cut Stump BB = Basal Bark SI = Stem injection

Species List	Growth Type	Flowering Time	Life Cycle	Reproduction and Dispersal	Control
American rat's tail grass (Sporobulus Jacquemontii)	Grass	Spring—Autumn	P	Seed/fauna/stock/ machinery	FS. HR
Annual ragweed (Ambrosia)	Herb	March	A	Flower/seed, water/fauna	FS, MC
Cabomba (Cabomba spp.)	Aquatic herb	Summer	P	Vegetative, water	WI
Fireweed (Senecio madagascariensis)	Herb	Winter	A	Seed, wind/water/fauna	FS, HR

Species List	Growth Type	Flowering Time	Life Cycle	Reproduction and Dispersal	Control
Giant rat's tail grass (Sporobolus pyramidalis and S. natalensis)	grass	All year	P	Seed / stock / machinery / water	FS, HR
Groundsel bush (Baccharis halimifolia)	shrub	Autumn	P	Seed / wind / water	CS, FS
Harrisia cactus (Eriocereus spp.)	succulent	Spring / Autumn	P	Vegetative / seed / fauna	FS
Hymenachne (Hymenachne amplexiacaulis)	grass	Autumn	P	Vegetative / seed / water / fauna	MC, FS
Mother of millions (Bryophyllum delagoense and B. daigremontianum x B. delagoense)	herb	Winter / Spring	P	Vegetative / water / garden waste	HR, FS
Parramatta grass (Sporobulus africanus)	grass	Summer / Autumn	P	Seed/fauna/stock/ machinery	FS
Parthenium (Parthenium hysterophorus)	herb	Summer / All year	A	Seed / water / machinery / fauna	BC, FS
Prickly acacia (Acacia nilotica)	shrub	Autumn	P	Seed / water / fauna / stock	BB, FS, CS, BC
Prickly pear (Opunitia spp. Other than O. ficus-indica)	succulent	Summer	P	Vegetative / seed / fauna	FS
Giant Parramatta grass (Sporobolus fertilis)	Grass	Spring—summer	P	Seed/fauna/stock/ machinery	FS, HR
Rubber vine (Cryptostegia grandiflora)	climber	All year	P	Seed / wind / water	BB, FS, MC
Salvinia (Salvinia molesta)	aquatic fen		P	Vegetative / fauna / water / human	BC, MC, FS
Thunbergia (Thunbergia grandiflora)	vine	Spring	P	Vegetative / seed / water / human	CS, FS
Water hyacinth (Eichhornia crassipes)	aquatic herb	Spring / Summer	P	Vegetative / seed / water / human	BC, MC FS
Water lettuce (Pistia stratiotes)	aquatic herb	Summer	P	Vegetative / seed / water / human	BC, MC, FS

Queensland Declared Pest Plants Class 3
P = Perennial; B = Biennial; A = Annual; FS = Foliar Spray; CS = Cut Stump; BB = Basal Bark; SI = Stem injection; HR = Hand Remove; BC = Biological Control; MC = Mechanical Control

Species List	Growth Type	Flowering Time	Life Cycle	Reproduction and Dispersal	Control
African fountain grass (Penniseturn setaceum)	Grass	Summer	P	Seed / vegetative	FS
African tulip tree (Spathodea campanulata)	Tree	Spring / Summer	P	Seed / fauna	CS, SI
Balloon vine (Cardiospermum grandiflorum	Vine	Summer	P	Seed / wind / water	CS, OS, BB
Basket Asparagus fern (Asparagus aethiopicus Sprengeri)	Creeper	Spring	P	Seed / vegetative / fauna / human	FS, HR
Blackberry (Rubus anglocandicans, R. fruiticosus agg)	Shrub	Autumn	P	Seed / fauna	MC, FS, HR
Broad leaf pepper tree (Schinus terebinthifolius	Shrub / small tree	Spring	P	Seed / fauna / water	BB, FS, CS
Species List	**Growth Type**	**Flowering Time**	**Life Cycle**	**Reproduction and Dispersal**	**Control**
Camphor laurel (Cinnamomum camphora	tree	Spring / Summer	P	Seed / fauna / water	SI, CS, BB
Captain Cook tree (Thevetia peruviana)	Shrub	Summer	P	Seed / water / human	CS, BB
Cat's claw vine (Macfadyena unguis-cati)	Vine	Summer	P	Seed / vegetative / wind / water	CS, BB, FS
Chinese celtis (Celtis sinensis)	Tree	Spring	P	Seed / fauna / water	CS, BB, SI
Climbing Asparagus vine (A. africanus and A. plumosa)	Vine	Spring	P	Seed / water	CS, BB
Dutchaman's pipe (Aristolochia campanulate)	Vine	Summer	P	Seed / garden waste	HR, FS, BB
Species List	**Growth Type**	**Flowering Time**	**Life Cycle**	**Reproduction and Dispersal**	**Control**
Lantana (all species) (Lantana spp.)	Shrub / creeper	All year	P	Seed / fauna / water / human	BC, CS, MC,FS
Maderia vine (Anredera cordifolia)	Vine	Spring / Autumn	P	Seed / vegetative / water / human	BB, FS, CS, HR
Privets (Ligustrum lucidum and L. sinense	Tree / shrub	Summer	P	Seed / water / fauna	BB, CS, SI

Purple rubber vine (Cryptostegia madagascariensis	Vine	Spring / Autumn	P	Seed / water	
Singapore daisy (Sphagneticola trilobata)	Ceeper	Spring / Autumn	P	Seed / vegetative / water / human	HR, FS
Yellow bells (Tecoma stans)	Shrub	Spring	P	Seed / wind / water	CS, BB

Herbicide Control

Council promotes safe and legally acceptable methods of herbicide application. Methods of application may vary with different plant species and location paying due care to the surrounding environment, operator and general public.

Herbicides can be applied in a variety of ways, depending on the type of weed being controlled. These methods are outlined in the table below.

Method	Description
Stem scraping	Scrape a section of stem with a sharp knife, to remove a thin layer of bark. Apply herbicide immediately to the exposed area. This method is for plants with aerial tubers, e.g. Madeira vine.
Cut and paint/swab	Cut the plant close to the ground and immediately apply herbicide to the cut surface. This method is ideal for controlling Balloon vine, Madeira plants such as Broad leaf pepper tree.
Basal bark	Appropriate herbicide is applied to the bark, right around the trunk. The height of application depends on the diameter of the tree's trunk. Suitable for younger plants and smooth bark adult trees such as Chinese celtis and Honey locust.
Foliar spray (wet spray)	A low concentration of herbicide applied as a spray to the point of visible wetness to the foliage of the plant and to the point of run-off. This method is ideal for controlling Groundsel bush, Annual ragweed, and Singapore daisy.
Boom spray	A type of wet spray applied with a boom. Suitable for dense infestations of plants such as Fireweed and Annual ragweed.
Stem injection	Herbicide is injected directly into the stem of the plant. This method is suitable for large weedy plants such as Camphor laurel, Broad leaf Pepper, and Tecoma.
Frill Ring	Cut into the cambium layer of tree and apply appropriate herbicide to the cut. This method is suitable for large woody trees such as Camphor laurel and Broad Leaf Pepper.

Biological Control
Council uses biological control agents on select infestations to assist in the control of declared pest plants as follows:

- For Salvinia—the weevil *(Cyrtobagous salviniae).*
- For Cat's claw creeper—the leaf Sucking Tingid *(Carvalhotingis visenda)* and Leaf Tying Moth *(Hypocosmia pyrochroma).* This project is being conducted in collaboration with Southeast Queensland Catchments.
- For Lantana—the stem-sucking bug *(Aconophora compressa).*

Council is also willing to participate in field trials of other biocontrol agents such as the Tiny Leaf Mining Fly *(Ophiomyia camarae)* for the control of Lantana and the two leaf-feeding beetles *(Phenrica sp.* and *Plectonycha correntina)* for control of Maderia vine.

Physical Control
Council also uses the following physical methods to remove infestations of declared pest plants located in waterways:

- Weed harvesters and excavators for large infestations .
- Hand removal of small infestations to reduce seed bank.

APPENDIX C

Procedure for development and adoption of the Pest Management Plan

Literature cited:

Land Protection (Pest and Stock Route Management) Act 2002.

Procedure for the development and adoption of the Pest Management Plan
The following is an extract from the *Land Protection (Pest and Stock Route Management) Act 2002*:

25 Local governments to have Pest Management Plan
(1) A local government must, within 2 years after this part commences, have a Pest Management Plan for declared pests in its area.

(2) The plan may include provision for the following—

(a) achievable objectives under the plan;
(b) strategies, activities and responsibilities for achieving the objectives;
(c) strategies to inform the local community about the content of the plan and achievement of its objectives;
(d) monitoring implementation of the plan and evaluating its effectiveness;
(e) other matters the local government considers appropriate for management of declared pests in its area.

26 Requirements of plan
A local government's Pest Management Plan must be consistent with the following—

(a) the principles of pest management;
(b) the State pest management strategies;
(c) the guidelines for pest management.

27 Preparing draft plan
(1) A local government must establish a working group to advise the local government about preparing its draft Pest Management Plan.

(2) The working group may include a representative of each department mentioned in section 17(1) the local government considers appropriate for preparing the plan.

(3) If asked by the local government, the chief executive of the department must nominate an individual as its representative on the working group.

(4) The individual must have the qualifications or experience to advise the local government about preparing its draft Pest Management Plan.

(5) In preparing the draft Pest Management Plan, the local government must have regard to the following—

(a) the principles of pest management;
(b) the State pest management strategies;
(c) the guidelines for pest management;
(d) the plans for managing declared pests on State-controlled land in its area;
(e) the interests of its local community, including, for example, the interests of land-holders, Aboriginal and Torres Strait Islander peoples, industry groups and members of the public.

28 Notice of draft plan and consideration of public submissions
(1) The local government must give public notice when its draft Pest Management Plan has been prepared.

(2) The notice must—

(a) be published in a newspaper circulating generally in the local government's area; and
(b) state the draft plan is available for inspection, free of charge, at the local government's public office; and
(c) invite the public to inspect the draft plan and make written submissions about it to the local government within 28 days after the notice is published (the ***submission period***).

(3) The local government must—

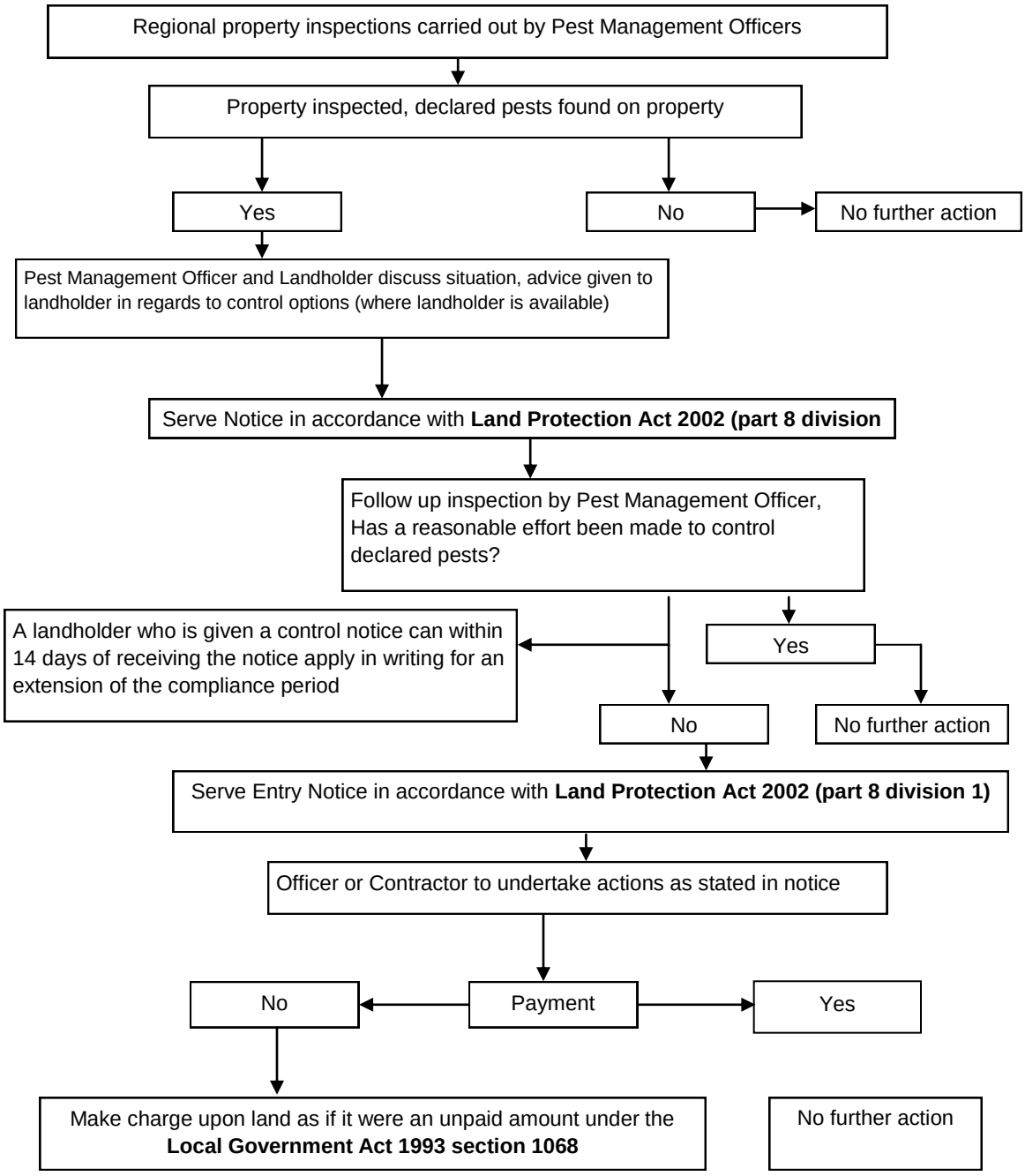
(a) make the draft plan available for public inspection in written form, free of charge, in the submission period; and
(b) consider any written submissions properly made to it.

APPENDIX D

Somerset Regional Councils Pest Management Enforcement Procedure

Somerset Regional Council

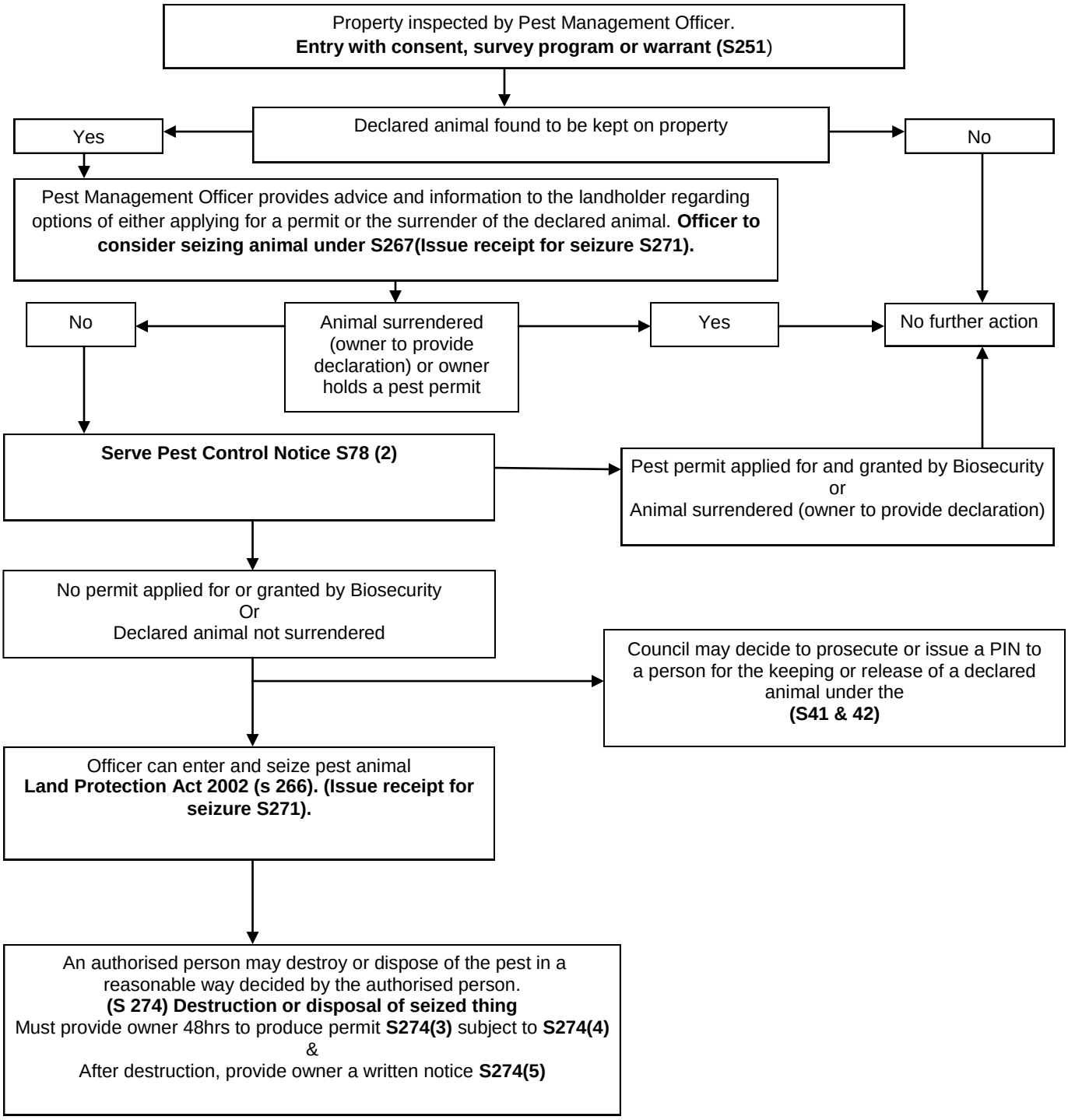
Pest PlantEnforcement Procedure



Grievances with this process can be addressed in writing to the Supervising Pest Management Officer or the CEO of Somerset Regional Council PO Box 117 Esk Qld 4312.

Somerset Regional Council

Enforcement Procedure for Declared Animals



Grievances with this process can be addressed in writing to the CEO of Somerset Regional Council PO Box 117 Esk Qld 431

APPENDIX E

Environmentally Significant Areas and Aquatic Environments

Environmentally Significant Areas

For the purpose of locating or mapping Environmentally Significant Areas in terms of the *Land Protection (Pest and Stock Route Management) Act 2002*, please utilise the below link to DEHP's interactive mapping system for Areas of Ecological Significance.

http://www.DEHP.qld.gov.au/environmental_management/land/natural_resource_management/ecological-significance-mapping.php

Major Aquatic Environments in the Somerset Region

Aquatic Environment	Locality within Somerset Region	Stakeholder responsible for managing area
Wivenhoe Dam	Central	Seqwater
Somerset Dam	Stretches from Kilcoy to Wivenhoe	Seqwater
Brisbane river	Stretching through Somerset Region North to South	
Stanley River	Main feed for Somerset	
Lockyer Creek	Main tributary from the Lockyer Valley in the South	